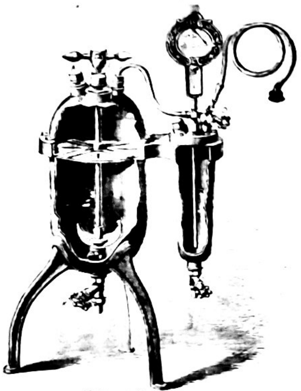
LIQUORS AND SODA FOUNTAIN DRINKS LIKE GRANDDAD USED TO MAKE

by Kurt Saxon



Matthews' Upright Generator

◆

- WINES
- WHISKEYS
- BREWING BEERS AND ALES
- CORDIALS OR LIQUEURS
- BITTERS
- CIDER
- ELIXIRS
- RATAFIAS & ESSENCES
- EXTRACTS
- SYRUPS
- PUNCHES
- ICE CREAMS
- SODAS
- SUNDAES
- FOUNTAIN DRINKS
- DESSERTS
- MIXING EVERY BAR & SODA FOUNTAIN DRINK ANY ELDER CAN REMEMBER
- ADVICE FOR BEGINNERS
- WRITTEN FOR LAYMEN

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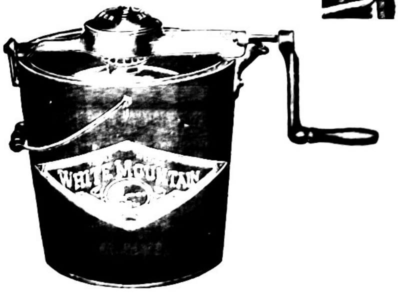
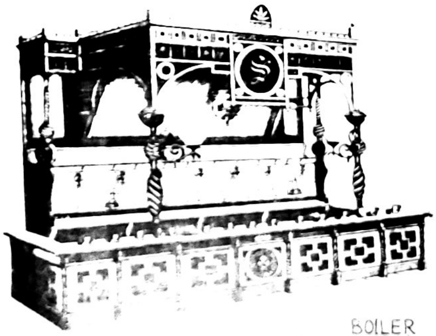
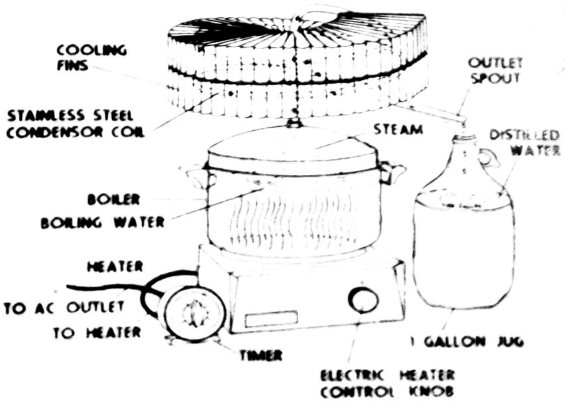
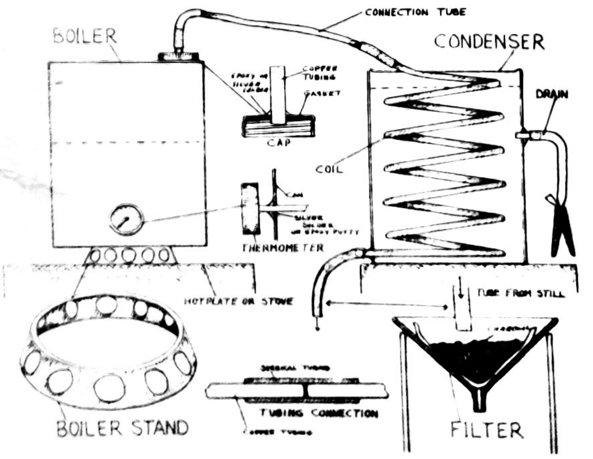


A Type of Hand Freezer.




COOLING FINS
STAINLESS STEEL CONDENSOR COIL
OUTLET SPOUT
STEAM
DISTILLED WATER
BOILER BOILING WATER
HEATER
TO AC OUTLET
TO HEATER
TIMER
ELECTRIC HEATER CONTROL KNOB
1 GALLON JUG


BOILER
CONNECTION TUBE
CONDENSER
EPOXY OR SILVER SOLDER
COPPER TUBING
GASKET
CAP
DRAIN
COIL
CAN
SILVER SOLDER OR EPOXY PUTTY
THERMOMETER
HOTPLATE OR STOVE
TUBE FROM STILL
CHARCOAL
SURGICAL TUBING
TUBING CONNECTION
COPPER TUBING
BOILER STAND
FILTER

LIQUORS
AND
SODA FOUNTAIN
DRINKS
LIKE
GRANDDAD
USED TO MAKE

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INTRODUCTION

There are many books on homemade booze on the market and I'd suggest you get one if you have never made any before. Once you learn the basic principals you can branch out to the more exotic recipes in this book. The recipes here aren't really difficult but they are mostly for larger batches than you may want to tackle at the beginning. Also, the terminology herein is pretty old-fashioned and may be hard to understand if you aren't familiar with trade.

GRANDDAD'S WONDERFUL BOOK OF CHEMISTRY has a dictionary covering just about every term used herein, as well as descriptions of the processes for working with all the materials you will be using.

After some practice you should be able to duplicate any liquor made in the last century and most which we have today.

If you are a connoisseur, you might consider duplicating old wine labels and making booze any wine taster would say was the real poop. Even if you admitted yours was new wine made the old way, you could probably make a mint duplicating a line of 19th century booze.

The biggest breakthrough in home booze making is C.W. Ireland's Distiller. When you've mastered wine making you'll want to go on to the harder stuff. With the Super Still you can turn out all the pop-skull you and your friends will ever need. Using the still for alcohol is illegal but I can't see anyone getting caught at it unless he advertised.

C.W.'s distiller was made for water purification and everyone should have one. I'm quite happy to use mine just to avoid the fluoride in the city water. It puts out up to six gallons of distilled water every 24 hours and should give you eight or more gallons of alcohol in the same period since alcohol distills much faster.

Just to test C.W.'s distiller I ran out and bought a gallon of Red Mountain Burgundy for $2.99 plus tax. It is the filthiest of the cheap wines and had I not been only testing, I would have used Pink Chablis.

I poured it in the pot and turned the heater to high. When alcohol started coming over I put it between high and medium.

In using this still, too much heat will cause the liquid to boil beyond the coil's capacity to distill it. This will cause vapor to come out the tube. You must turn it down then because this means the liquid is escaping and you will not only waste liquid but get less out of the still, since the vapor is going elsewhere.

In the beginning, the alcohol flows out without a break. At this point it is from 150 to 200 proof alcohol. After awhile it will begin to trickle. Now it is from 100 to 150 proof. At this point I called in a neighbor wise in such matters. He tasted a shot glass of trickle and pronounced it smooth, but with a tantalizing bite and said it was about 140 proof.

After a while longer, it began to drip. This was from 100 proof on down to where the alcohol content in the dregs was negligible. Then there was little activity until the water began coming over in larger drips and glops. I then took the alcohol away and let all the water come over so I could measure all the liquid. I wanted to see if there was much loss of alcohol and water due to the fact that the well fitted lid has no gasket.

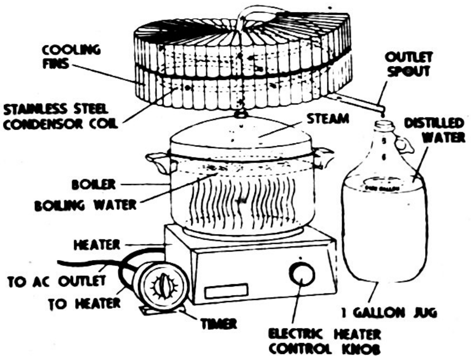
I distilled my gallon at between medium and high. If you do it you should set it at medium or even lower. Since water comes over at medium, that means it is over 212 degrees Fahrenheit, at which point water boils. Since alcohol boils at only 173½ degrees Fahrenheit, any increase in temperature over that would be a waste of energy and would also liberate water vapor to distill as part of the alcohol.

When all the water was out I measured both water and alcohol and found that there was less than two cups short. In the bottom of the pot there was over a quarter inch of gummy sludge. This made about two cups, proving that there was no appreciable loss of vapor, alcohol or water.

It was messy cleaning out the pot, but necessary since I needed to let it go all the way for measuring and since I wanted to see the amount of cruddy sludge left behind. If you do it, be sure to stop the still when the alcohol stops and then empty the pot's sludgy contents down the drain.

Cheap wine, and of course, any homemade wine or whiskey, will have fusel oils which taste bitter. It can even be harmful in large quantities. Dick's 1872 process for removing fusel oil from alcohol, No. 1445, follows: "To Free Alcohol from Fusel Oil. This may be effected by digesting the alcohol with charcoal. The alcohol is filtered through alternate layers of sand, wood-charcoal, boiled wheat and broken oyster shells; this removes all other impurities as well. The fusel oil can be extracted from small quantities of alcohol, by adding a few drops of olive oil to the spirit, agitating thoroughly in a bottle, and after settling, decanting. The olive oil dissolves and retains the fusel oil."

For the real poop on alcohol for its own sake, get GRANDDAD'S WONDERFUL BOOK OF CHEMISTRY. Alcoholmetry starts on page 129 and anything else you want to know about it starts on page 134.



From my bottle of Red Mountain Burgundy, I got almost a quart of about 100 proof alcohol for $2.99 plus tax. A fifth of 100 proof Vodka costs $6.10 plus tax. This cheap wine has 12% pure alcohol. That means it has 24%, or almost a quart, of 100 proof alcohol after distillation.

If you cut the 100 proof goody with orange juice or something, you can get just as merry on half or less, since stronger stuff does it better than wine. This, in itself, would cut your liquor bill by half or more. By the time you'd bought 60 gallons of cheap wine, you'd have paid for the still in savings alone.

(I wouldn't worry about fusel oil in commercial wines or even in the homemade stuff. But if you are into making your own whiskey from mash, you ought to consider filtering it.)

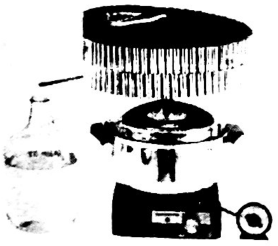
If you want the alcohol for chemistry or making extracts, hash oil, flavors, etc., you can re-distill the alcohol until you've got the purest stuff going.

If you make your own wine you can make popskull to sell.

The still would work just as well with whiskey mash. You could fit the still and pot lid to a cooker of unlimited size and get at least eight gallons of alcohol in 24 hours since alcohol distills faster than water.

My granddad usually had something going back in the hills. His still was primitive compared to C.W.'s and it took a lot of work. If he'd had my Aqua Vitae AC6, he would have made the proper sized hole for the still lid in a 55 gallon steel drum and used that. He would then have put the drum on the stove in a back room, filled it with mash and then lit the fire. Then he'd have just sat back and relaxed as he liked to do. Also, he'd have had less to fear from Revenooers catching him in his own home than when the still was hidden outside.

If you want this still as soon as possible, send C.W. $180.00 plus $10.00 for shipping. He will decide if it's cheaper and quicker to send it by United Parcel Service or Parcel Post and will send you a refund for anything the shipping costs under your $10.00. If you want more information, just ask for it. Write to C.W. Ireland, P.O. Box 2216, Everett, Wash. 98203.



AC-6 — Weight 13½-lbs., Width 14", Height 19½" overall (14" without heater), Capacity is up to 6 gallons per day. (formerly AC-5).

Improved Tom Gin Cocktail.

(Use medium-size glass.)

Fill with fine ice.
Take 1 dash Curaçoa.
2 dashes bitters (some preferring orange only).
1 jigger Old Tom.
Stir well, and strain in cool cocktail-glass.

Wachholderbeeren Hahnschwanz.

Prepared in same manner, using two dashes syrup instead of Curaçoa and Holland gin.

Coffee Cocktail.

(Use large barglass.)

Fill two thirds full ice.
1 spoonful sugar.
1 egg.
½ jigger sherry.
½ jigger port.
Shake thoroughly, and strain, with nutmeg on top.

Trilby Cocktail.

(Use medium-size glass.)

Fill with shaved ice.
2 dashes raspberry syrup.
⅓ jigger vermouth.
⅔ fine brandy.
1 dash orange bitters.
Stir well, and strain into tall, fancy glass, with fruit in season.

Soda Cocktail.

(Use large soda-glass.)

Take 1 barspoonful sugar.
2 dashes Boker's or Angostura bitters.
3 lumps ice (not fine).
1 bottle soda plain (or lemon).
Serve in same glass, with spoon.

St. Petersburg Cocktail.

Fill glass with fine ice, using medium-size thin glass or goblet; then empty out ice; now fill with sugar, empty again; now put in two lumps ice, two thirds jigger brandy, piece twisted lemon-peel; fill up with champagne.

Morning Cocktail.

(Use medium-size glass.)

Take 3 dashes syrup.
2 dashes Curaçoa.
2 dashes Angostura or Boker's bitters.
1 dash absinthe.
1 pony brandy.
1 pony whiskey.
Stir well, and strain into long, thin glass, filling it up with fresh apollinaris, and stir with a spoon having a little sugar in it.

Hendrick Cocktail.

(Use old-fashioned toddy glass.)

Fill two thirds full ice.
Take 2 dashes syrup.
2 dashes bitters.
1 dash absinthe.
1 jigger old Kentucky bourbon.
1 small slice lemon.
Stir, and serve in the same glass without straining.

John Collins.

Put in mixing-glass one half lemon with peel on; one spoonful sugar; muddle well; fill glass two thirds full of shaved ice, one jigger Old Tom gin; shake well; strain in thin lemonade-glass; fill with club soda; stir.

Irish Cocktail.

(Use large glass.)

Take 1 lump ice.
2 drops Angostura or Boker's bitters.
½ naggin Irish whiskey.
1 bottle C. & C. ginger ale.

This is a very palatable drink, and is the favorite of the Irish members of Parliament.

Dutch Cocktail.

(Use large goblet.)

One third full of beer.
One bottle ordinary mineral water.

This is a very good drink for stopping thirst. It is universally known.

Chocolate Cocktail.

(Use large lemonade glass.)

Fill with ice.
Take 1 barspoonful of sugar.
1 egg.
½ jigger mariaschino.
½ jigger chartreuse.
Shake well, and strain in cocktail-glass.

Durkee.

(Use large glass.)

Put in mixing-glass one lemon with peel on; one spoonful sugar; muddle well; fill two thirds full fine ice, one jigger Jamaica rum, one pony Curaçoa; fill with club soda; carefully stir and strain. This will serve for two split.

K and K Punch.

Put in mixing-glass one barspoonful sugar, one quarter lemon with peel on; muddle well; fill two thirds full of fine ice, one jigger whiskey; fill with Apollinaris; stir with spoon thoroughly; strain in ale-glass previously cooled; add fruit.

Rickey.

Take nice thin goblet, one lump ice, squeeze juice of one good-sized lime or two small ones, one jigger Old Tom Gin. Fill up with Club soda, stir, and serve with spoon in goblet.

Old-fashioned Cocktail.

Crush in small barglass one lump loaf sugar, put in two dashes Angostura bitters, one piece twisted lemon-peel, two or three small lumps of ice, one jigger whiskey. Serve with small barspoon in glass.

Strained Toddy.

Put in mixing glass one barspoonful sugar, one quarter lemon with peel on; muddle; fill glass two thirds full of shaved ice, one jigger whiskey, one jigger water, stir well, strain in star champagne-glass, nutmeg on top.

A Reviver.

Put three or four lumps of ice in lemonade-glass, one jigger raspberry syrup, one wineglass milk, one pony brandy; fill glass with sweet soda.

Stone Fence.

Serve the same as plain whiskey, substituting cider for water on the side.

Punch a la Dwyer.

In punchbowl put—
1 dozen lumps cut loaf sugar.
1 lemon sliced.
1 orange sliced thin.
1 quart Burgundy.
2 jiggers 1835 Cognac.
1 quart Apollinaris.
1 quart champagne.
1 large lump ice.
Stir together; serve.

Seltzer Lemonade.

Put 1 peeled lemon, cut in two, in large mixing-glass, 1 large barspoonful sugar, muddle thoroughly, fill half full of ice, fill with Seltzer, stir with spoon, strain in thin glass, add fruit.

Milk Punch.

Fill large mixing-glass half full of ice.
Take 1 large spoonful of sugar.
1 jigger brandy.
4 or 5 dashes rum.
Fill the glass with milk, shake well, strain in tall, thin lemonade-glass, nutmeg on top.

Brandy and Mint.

Put in small barglass 1 lump cut loaf-sugar, dissolve in water.
Take 1 sprig mint, bruised slightly.
2 lumps ice.
1 jigger brandy.
Serve with small barspoon in glass; ice water on side.

Brandy and Ginger Ale.

Put in thin lemonade-glass
1 jigger brandy.
1 lump ice.
Fill with imported ginger ale; serve.

Absinthe Frappe.

Fill mixing-glass with fine ice, one jigger absinthe, a few drops anisette; shake well, strain in claret-glass and fill with Seltzer.

Champagne Cup.

Mix in punchbowl
1 quart champagne.
1 bottle club soda.
1 pony glass Curaçoa.
2 slices cucumber rind.
A few strawberries, if in season.
3 or 4 slices pineapple.
Serve in star champagne-glasses.

Port Wine Sangaree.

Fill mixing-glass half full of fine ice.
1 barspoonful sugar.
1 piece lemon-peel.
1 jigger port wine.
Shake well, strain in star champagne-glass, nutmeg on top.

Whiskey, brandy, and gin in the same manner.

Half and Half. (Dublin Style.)

Fill ale-glass one half with ale and the other with stout.

Dripped Absinthe.

Put pony-glass in mixing-glass, fill around with fine ice, fill pony with absinthe, drip about two jiggers water through drip in absinthe, running over the sides of pony; then take out pony and stir strain in port-wine glass.

Whiskey and Glycerine.

Half tablespoonful pure glycerine, one jigger of whiskey. This is a most excellent remedy for a cold or any disease of the throat or lungs. When possible, it should be taken a spoonful at a time at intervals of a half hour, letting it trickle down the throat. If the taste is not agreeable, a teaspoonful of wintergreen essence will make it palatable.

Claret Flip.

Fill mixing-glass two thirds full of fine ice, large barspoonful sugar, two jiggers claret, one egg; shake well, strain in star champagne glass, nutmeg on top.

Wedding Punch.

Take ½ pint of pineapple juice.
1 pint of lemon juice.
1 pint of lemon syrup.
1 pint of claret or port wine.
½ pound of sugar.
½ pint of boiling water.
6 grains of vanilla.
1 grain of ambergris.
1 pint of strong brandy.

Rub the vanilla and ambergris with the sugar in the brandy thoroughly; let it stand in a corked bottle for a few hours, shaking occasionally. Then add the lemon juice, pineapple juice and wine; filter through flannel, and lastly add the syrup.

Tea Punch.

(Use heated metal bowl.)

Take ½ pint of good brandy.
½ pint of rum.
¼ pound of loaf-sugar, dissolved in water.
1 ounce of best green tea.
1 quart of boiling water.
1 large lemon.

Infuse the tea in the water. Warm a silver or other metal bowl until quite hot; place in it the brandy, rum, sugar, and the juice of the lemon. The oil of the lemon peel should be first obtained by rubbing with a few lumps of the sugar. Set the contents of the bowl on fire; and while flaming, pour in the tea gradually, stirring with a ladle. It will continue to burn for some time, and should be ladled into glasses while in that condition. A heated metal bowl will cause the punch to burn longer than if a china bowl is used.

Punch a la Romaine.

(For a party of fifteen.)

Take 1 bottle of rum.
1 bottle of wine.
10 lemons.
2 sweet oranges.
2 pounds of powdered sugar.
10 eggs.

Dissolve the sugar in the juice of the lemons and oranges, adding the thin rind of one orange; strain through a sieve into a bowl, and add by degrees the whites of the eggs beaten to a froth. Place the bowl on ice for a while, then stir in briskly the rum and the wine.

Duke of Norfolk Punch.

(For bottling.)

Take 2 quarts of brandy.
1 quart of white wine.
1 quart of milk.
1¼ pounds of sugar.
6 lemons.
3 oranges.

Pare off the peel of the oranges and lemons very thin; put the peel and all the juice into a vessel with a close-fitting lid. Pour on the brandy, wine and milk, and add the sugar after having dissolved in sufficient water. Mix well, and cover close for twenty-four hours. Strain until clear, and bottle.

PUNCH.

The origin of this word is attributed by Dr. Doran, in his "History of Court Fools," to a club of Athenian wits; but how he could possibly connect the word Punch with these worthies, or derive it from either their sayings or doings, we are totally at a loss to understand. Its more probable derivation is from the Persian Punj, or from the Sanscrit Pancha, which denotes the usual number of ingredients of which it is composed, viz., five. The recipes, however, for making this beverage are very numerous , and, from various flavoring matters which may be added to it, Punch has received a host of names derived alike from men or materials.

Brandy & Soda

(Use medium thin barglass.)

Take 1 pony glass of brandy.
1 small lump of ice.

Add one bottle of plain soda water. This bottle of soda will do for two split.

Brandy and Gum.

(Use small barglass.)

Take 2 dashes of gum syrup.
1 small lump of ice.

Hand the bottle to the customer and let him help himself.

Serve ice water in a separate glass.

Sherry Cobbler.

(Use large barglass.)

Take 1 tablespoonful powdered sugar.
1 slice orange cut in 2 parts.
Dissolve sugar.

Fill the glass with shaved ice, then fill it up with sherry wine; stir it carefully, ornament the top with pineapple and berries and serve with straws.

Champagne Cobbler.

(Use bottle of wine to four large barglasses.)

Put in tall, thin glass two lumps sugar, one slice orange, one piece twisted lemon peel, fill two thirds full shaved ice, fill balance with wine; stir moderately, ornament in a tasty manner, and serve with straws.

Claret Cup.

Take 1 bottle of claret.
little water.
1 tablespoonful of powdered sugar.
1 teaspoonful of powdered cinnamon, cloves, and allspice, mixed.
½ lemon.
1 bottle soda.

Mix the ingredients well together, adding the thin rind of cucumber and some mint, not pressed. This is a nice summer beverage for evening parties.

Porter Cup.

Take 1 bottle of porter.
1 bottle of ale.
1 glass of brandy.
1 dessertspoonful of syrup of ginger.
3 or 4 lumps of sugar.
½ nutmeg, grated.
1 teaspoonful carbonate of soda.
1 cucumber.

Mix the porter and ale in a covered jug; add the brandy, syrup of ginger, and nutmeg; cover it, and expose it to the cold for half an hour. When serving, put in the carbonate of soda.

Sherry Cocktail.

(Use small mixing-glass.)

Made in same manner as whiskey, only using Amontillada sherry.

Curacoa Punch.

(Use large barglass.)

Take one tablespoonful of powdered white sugar, dissolved in a little water.
1 wineglass of brandy.
¼ wineglass of Jamaica rum.
½ pony-glass of Curaçoa.
the juice of half a lemon.

Fill the tumbler with shaved ice, shake well, and ornament with fruits of the season. Serve with a straw.

Roman Punch.

(Use large barglass.)

Take one tablespoonful of powdered white sugar, dissolved in a little water.
1 tablespoonful of raspberry syrup.
1 teaspoonful of Curaçoa.
1 wineglass of Jamaica rum.
½ wineglass of brandy.
the juice of half a lemon.

Fill with shaved ice, shake well, dash with port wine, and ornament with fruits in season. Serve with a straw.

Burnt Brandy.

Put 1 lump sugar in saucer.
1 jigger brandy.

Light it with a match, let it burn for a minute or so, extinguish the flame, put in whiskey-glass and serve.

Champagne Punch.

(One quart of punch.)

Take 1 quart bottle of champagne wine.
3 tablespoonfuls of sugar.
1 orange, sliced.
the juice of a lemon.
2 slices of pineapple, cut in small pieces.
1 wineglass of raspberry or strawberry syrup.

Ornament with fruits in season, and serve in champagne goblets.

This can be made in any quantity by observing the proportions of the ingredients as given above. Four bottles of wine make a gallon, and a gallon is generally sufficient for fifteen persons in a mixed party.

Tom Gin Cocktail.

Fill mixing-glass two thirds full of shaved ice.
1 or 2 dashes orange bitters.
1 barspoonful syrup.
1 jigger Tom gin.

Stir and strain in cooled cocktail-glass, twist a piece of lemon-peel over the top to flavor, serve fruit if desired.

Golden Fizz.

Same as Silver Fizz, using the yolk in place of the white of an egg.

Bear in mind all fizzes and similar drinks must be taken while effervescing or they lose their natural taste.

Brandy Fizz.

(Use medium barglass.)

Take 1 teaspoonful of powdered sugar.
3 dashes of lemon juice.
1 wineglass of brandy.
Fill with ice, shake well and strain.

Fill up the glass with Apollinaris or Seltzer water.

Gin Fizz.

(Use medium barglass.)

Take 1 teaspoonful of powdered sugar.
3 dashes of lemon juice.
1 wineglass of Old Tom gin.
Fill with ice, shake well and strain.

Fill up the glass with Apollinaris or Seltzer water, stir thoroughly and serve.

Silver Fizz.

(Use large barglass.)

Take 1 tablespoonful of pulverized sugar.
3 dashes of lemon or lime juice.
The white of one egg.
1 wineglass of Old Tom gin.
2 or 3 small lumps of ice.

Shake up thoroughly, strain into a medium barglass, and fill it up with Seltzer water.

Manhattan Milk Punch.

Same as the *Cold* Milk Punch, with the addition of five drops of aromatic tincture.

Milk Punch.

(Use large barglass.)

Take 1 desertspoonful of fine sugar.
1 wineglass of brandy.
½ wineglass Santa Cruz rum.
½ glass fine ice.

Fill with milk, shake the ingredients well together, strain into a large glass, and grate a little nutmeg on top.

Hot Milk Punch.

(Use large barglass.)

This punch is made the same as the above, with the exception that hot milk is used, and no ice.

Whiskey Sour.

(Use small barglass.)

Take one large teaspoonful of powdered white sugar, dissolved in a little Seltzer or Apollinaris water.
The juice of half a small lemon.
1 wineglass of bourbon or rye whiskey.

Fill the glass full of shaved ice, shake up and strain into a claret glass. Ornament with berries.

Brandy Sour.

(Use small barglass.)

Take one large teaspoonful of powdered white sugar, dissolved in a little Apollinaris or seltzer water.
The juice of half a lemon.
1 dash of Curaçoa.
1 wineglass of brandy.

Fill the glass with shaved ice, shake, and strain into a claret-glass. Ornament with orange and berries.

Egg Sour.

(Use small barglass.)

Take 1 teaspoonful of powdered sugar.
3 dashes of lemon juice.
1 pony of Curaçoa.
1 pony of brandy.
1 egg.
2 or 3 small lumps of ice.

Shake up well, and remove the ice before serving.

Apple Toddy.

(Use medium barglass, hot.)

Take 1 large teaspoonful of fine sugar dissolved in a little boiling-hot water
1 wineglass of brandy (applejack).
½ of a baked apple.

Fill the glass two thirds full of boiling water, stir up, and grate a little nutmeg on top. Serve with a spoon.

Pousse l'Amour.

(Use a sherry-glass.)

Take ½ glass of maraschino.
Yolk of 1 egg.
Sufficient vanilla cordial to surround the egg.
1 tablespoonful of fine old brandy.

First; pour in the maraschino, then introduce the yolk with a spoon, without disturbing the maraschino; next carefully surround the egg with vanilla cordial, and lastly put the brandy on top.

In making a Pousse of any kind the greatest care should be observed to keep all the ingredients composing it separate. This may best be accomplished by pouring the different materials from a sherry-wine glass. It requires a steady hand and careful manipulation to succeed in making a perfect Pousse.

Lawlor's Pousse Cafe.

(Use a small wineglass.)

Take ¼ Curaçoa.
¼ maraschino.
¼ yellow chartreuse.
¼ old Cognac brandy.

Keep all the ingredients separate. See concluding remarks in the preceding recipe.

Parisian Pousse Cafe.

(Use small wineglass.)

Take ⅖ Curaçoa.
⅖ Kirschwasser.
⅕ chartreuse.

Care should be taken to keep the ingredients from mixing together. See preceding recipes.

Hot Whiskey Sling.

(Use medium barglass, hot.)

Take 1 small teaspoonful of powdered sugar.
1 wineglass of bourbon or rye whiskey.

Dissolve the sugar in a little hot water, add the whiskey, and fill the glass two thirds full of boiling water; grate a little nutmeg on top and serve.

Hot Spiced Rum.

(Use medium barglass, hot.)

Take 1 small teaspoonful of powdered white sugar.
1 wineglass of Jamaica rum.
1 teaspoonful of spices (allspice and cloves, not ground).
1 piece of sweet butter as large as half a chestnut.

Dissolve the sugar in a little boiling water, add the rum, spices, and butter, and fill the glass two thirds full of boiling water.

Hot Rum.

(Use medium barglass, hot.)

Take 1 lump of cut sugar.
1 wineglass of Jamaica rum.
1 piece of sweet butter as large as half a chestnut.

Dissolve the sugar in a little boiling water, add the rum and butter, fill the glass two thirds full of boiling water, stir, grate a little nutmeg on top, and serve.

Eggnog.

(Use large barglass.)

Take 1 large teaspoonful of powdered sugar.
1 fresh egg.
½ wineglass of brandy.
½ wineglass of Santa Cruz rum.
A little shaved ice.

Fill the glass with rich milk, and shake up the ingredients until they are thoroughly mixed. Pour the mixture into a goblet, excluding the ice, and grate a little nutmeg on top. This may be made by using a wineglass of either of the above liquors, instead of both combined.

Hot Eggnog.

(Use large barglass.)

This drink is very popular in California, and is made in precisely the same manner as the cold eggnog above, except that you must use boiling water instead of ice.

Claret Punch.

(Use good-sized glass.)

Nearly fill with claret.
1 piece of lemon peel.

Put in thin lemonade-glass one large spoonful sugar, sufficient water to dissolve; fill half full of fine ice; stir well, trim with fruits, serve with straws

Brandy Punch.

(Use large barglass.)

Take 1 teaspoonful of powdered sugar, dissolved in a little water.*
1 wineglass of brandy.
½ wineglass of Jamaica rum.
Juice of half a lemon.
2 slices of orange.
1 piece of pineapple.

Fill the tumbler with shaved ice; shake up thoroughly, and dress the top with berries in season; serve with a straw.

Brandy and Rum Punch.

(Use large barglass.)

Take 1 tablespoonful of powdered sugar, solved in a little water.
1 wineglass of Santa Cruz rum.
½ wineglass of brandy.
Juice of half a small lemon.
1 slice of orange (cut in quarters.)
1 piece of pineapple.

Fill the tumbler with shaved ice; shake and dress the top with sliced lime and berrie season; serve with a straw.

Hot Brandy.

In hot whiskey-glass put one lump cut-loaf su enough hot water to dissolve, one jigger bran fill glass to within half an inch of the top with water, nutmeg on top; serve with spoon in gla

Hot Irish Whiskey Punch.

(Use medium barglass.)

Take 1 wineglass Irish whiskey.
2 wineglasses of boiling water.
2 lumps of loaf-sugar.

Dissolve the sugar well with one wineglass of water, then pour in the whiskey, add the balance the water, and put in a small piece of lemon pe Before using the glass rinse it in hot water.

Hot Scotch Whiskey Punch.

(Use medium barglass.)

Take 1 wineglass of Glenlivet or Islay whisk
2 wineglasses of boiling water.
Sugar to taste.

Dissolve the sugar with one wineglass of water, then pour in the whiskey, add the balance the water, and put in a small piece of lemon pe Before using the glass rinse it in hot water.

Brandy Fix.

Put in thin lemonade-glass small barspoonf sugar, enough water to dissolve; fill half full of ic juice one quarter lemon, four dashes pineapp syrup, one jigger brandy; stir well, fill glass full ice, trim with seasonable fruits; serve with stra

Champagne Cocktail—(Plain.)

Put one lump cut-loaf sugar in small, thin lemo ade-glass, one or two dashes Angostura bitters, piece twisted lemon peel; put two or three sm lumps of ice; fill with champagne; stir gent serve.

Champagne Julep.

Use thin lemonade-glass, one lump cut-loaf sug two or three small lumps of ice, two sprigs m bruised slightly; pour in the champagne slow stir gently until full; add seasonable fruits; ser

Brandy Sour.

Fill mixing-glass two thirds full of fine ice, ju one quarter lemon, one dash Jamaica rum, one lar spoonful sugar; shake well; strain in punch-gla add fruit. Use seven-eighths jigger brandy.

Brandy Flip.

Fill mixing-glass two thirds full of fine ice, o barspoonful sugar, one jigger brandy, one eg shake well; strain in star champagne-glass, nutm on top; serve.

Brandy and Soda.

Put two or three lumps ice in thin lemon glass, one jigger brandy; pour in one bottle of soda.

Splificator.

(Use medium thin glass.)

One piece ice; let customer help himself to whiskey, and fill up with Apollinaris water.

Buffalo.

(Use small goblet.)

And serve same as the foregoing recipe.

Brandy Sangaree.

(Use medium barglass.)

Take ½ teaspoonful of fine white sugar dissolved in a little water.
1 wineglass of brandy.
Fill the glass one third full of shaved ice, shake up well, strain into a small glass and dash a little Port wine on top. Serve with a little grated nutmeg.

Whiskey Sangaree.

(Use medium barglass.)

Same as brandy sangaree, only using rye or bourbon whiskey instead of the brandy.

Gin Sangaree

Same as brandy or whiskey sangaree, substituting Holland or Old Tom gin instead of brandy or whiskey.

Brandy Smash.

(Use small barglass.)

Take 1 barspoonful of sugar.
2 tablespoonfuls of water.
3 or 4 sprigs of tender mint.
1 wineglass full of brandy.
Press the mint in the sugar and water to extract the flavor, add the brandy, and fill the glass two thirds full of shaved ice; stir thoroughly, and ornament with half a slice of orange and a few fresh sprigs of mint; serve with a straw.

Gin Smash.

(Use small barglass.)

Take 1 barspoonful of sugar.
2 teaspoonfuls of water.
1 wineglass of gin.
3 or 4 sprigs of tender mint.
Put the mint in the glass, then the sugar and water; mash the mint to extract the flavor; add the gin, and fill up the glass with shaved ice; stir up well, and ornament with two or three fresh sprigs of mint.

Whiskey Smash.

(Use small barglass)

Take 1 barspoonful of sugar.
2 teaspoonfuls of water.
3 or 4 sprigs of young mint.
1 wineglass of whiskey.
Proceed exactly as directed in the last recipe.

To Frappe Champagne.

Place the bottle in the champagne pail, fill with fine ice and salt; whirl or twist the bottle several times, and it will become almost frozen.

High Ball (or Bradley Martin).

Put in thin ale-glass one lump of ice; fill with syphon seltzer to within an inch of the top, then float one half jigger Cognac brandy or Rye whiskey.

Whiskey and Mint.

Put in barglass one lump cut-loaf sugar, enough water to dissolve, one or two sprigs mint; mash sugar and mint together; serve same as plain whiskey, leaving barspoon in glass.

Gin Crust.

(Use small barglass.)

Gin crust is made like the brandy crust, using gin instead of brandy.

Brandy Daisy.

(Use small barglass.)

Take 3 or 4 dashes of gum syrup.
2 or 3 dashes of Curaçoa cordial.
The juice of half a small lemon.
1 small wineglass of brandy.
2 dashes of Jamaica rum.
Fill glass one third full of shaved ice.
Shake well, strain into a large cocktail-glass, and fill up with Seltzer water from a syphon.

Whiskey Daisy.

(Use small barglass.)

Take 3 dashes of gum syrup.
2 dashes syrup.
The juice of half a small lemon.
1 wineglass of bourbon or rye whiskey.
Fill glass one third full of shaved ice.
Shake well, strain into a large cocktail-glass, and fill up with Seltzer, Apollinaris or Imperial water.

Gin Daisy.

In same manner as whiskey, only using gin.

Beef Tea.

Put a barspoonful of the extract in a hot cup; add salt, pepper and celery salt; fill the cup with hot water, stir well, adding a few drops Worcestershire sauce and a few drops of old sherry. Serve with fine ice in glass on side.

Remsen Cooler.

Pare the rind from a lemon, leaving the rind whole; put it in a large punch-glass with two or three small lumps ice and a jigger Old Tom gin; fill up with plain soda.

Big 4 Mint Julep.

(Use large thin glass.)

Put some mint in glass; add a barspoonful powdered sugar; dissolve; don't crush the mint; put in some fine ice, one and a quarter jigger fine old whiskey; stir, and fill up with ice to top of glass; now place two nice sprigs of mint in glass, decorate with fruit, and lastly, a dash of St. Croix rum on top; sprinkle a little sugar on mint and serve with straws.

Gin Julep.

(Use large barglass.)

The gin julep is made with the same ingredients as the mint julep, omitting the fancy fixings.

Whiskey Julep.

(Use large barglass.)

The whiskey julep is made the same as the mint julep, omitting all fruits and berries.

Pineapple Julep.

(For a party of five.)

Take the juice of two oranges.
1 gill of raspberry syrup.
1 gill of Maraschino.
1 gill of Old Tom gin.
1 quart bottle of sparkling Moselle.
1 ripe pineapple, peeled, sliced, and cut up.
Put all the materials in a glass bowl; ice, and serve in flat glasses, ornamented with berries in season.

Brandy Julep.

Same as Big 4, using good brandy instead whiskey.

Tom and Jerry.

(Use punch-bowl for the mixture.)

Take 12 fresh eggs.
½ small barglass of Jamaica rum.
1½ teaspoonfuls of ground cinnamon.
½ teaspoonful of ground cloves.
½ teaspoonful of ground allspice.
Sufficient fine white sugar.

Beat the whites of the eggs to a stiff froth, and the yolks until they are as thin as water; then mix together, and add the spice and rum; stir up thoroughly, and thicken with sugar until the mixture attains the consistence of a light batter.

How to Serve Tom and Jerry.

(Use T. and J. Mug)

Take 1 desertspoonful of the above mixture.
1 wineglass of brandy or whiskey.
Fill the glass with boiling water, grate a little nutmeg on top, and serve with a spoon.

Hot English Rum Flip.

(One quart.)

Take 1 quart of ale.
1 gill of old rum.
4 raw fresh eggs.
4 ounces of moist sugar.
Heat the ale in a sausepan; beat up the eggs and sugar, add the nutmeg and rum, and put it all in a pitcher. When the ale is near to a boil, put it in another pitcher; pour it very gradually in the pitcher containing the eggs, etc., stirring all the while very briskly to prevent the eggs from curdling; then pour the contents of the two pitchers from one to the other until the mixture is as smooth as cream.

Hot English Ale Flip.

(One quart.)

This is prepared in the same manner as the Rum Flip, omitting the rum and the whites of two of the eggs.

Sleeper.

Take 1 gill of old rum.
1 ounce of sugar.
2 raw fresh eggs.
½ pint of water.
Mix well.

Port Wine Flip.

(Use large barglass.)

Take 1 barspoonful of powdered sugar.
1 large wineglass of Port wine.
1 fresh egg.
Glass two thirds full of ice.
Break the egg into the glass, add the sugar, and lastly the wine and ice. Shake up thoroughly, and strain into a medium-sized goblet; nutmeg on top.

Sherry Wine Flip.

(Use large barglass.)

This is made precisely as the Port wine flip, substituting sherry wine instead of Port.

Sherry and Bitters.

(Use sherry wineglass.)

Take one dash of Angostura bitters, twist the glass around so that the bitters will cover the whole surface of the glass. Fill with sherry wine and serve.

Sherry and Egg.

(Use small barglass.)

Pour in glass a little sherry. Break in the glass one fresh egg. Then fill with sherry.

Sherry and Ice.

(Use small barglass.)

Put in the glass two or three small lumps of ice. Place the decanter of wine before customer.

Catawba Cobbler.

(Use large barglass.)

Take 2 teaspoonfuls of fine white sugar, dissolved in a little water.
1 slice of orange cut into quarters.

Fill the glass half full of shaved ice, then fill it up with catawba wine. Ornament the top with berries in season, and serve with straws.

Hock Cobbler.

(Use large barglass.)

This drink is made the same way as the catawba cobbler, using Hock wine instead of catawba.

Claret Cobbler.

(Use large barglass.)

This drink is made the same way as the catawba cobbler, using claret wine instead of catawba, and is a very refreshing drink.

Sauterne Cobbler.

(Use large barglass.)

The same as catawba cobbler, using sauterne instead of catawba.

Rhine Wine Cobbler.

(Use large barglass.)

The same as catawba using Rhine wine.

Brandy Crust.

(Use small barglass.)

Take 3 or 4 dashes of gum syrup.
1 dash of Angostura bitters.
1 wineglass of brandy.
2 dashes of curaçoa.
1 dash lemon juice.

Before mixing the above ingredients prepare a cocktail-glass as follows:

Rub a sliced lemon around the rim of the glass, and dip it in pulverized white sugar, so that the sugar will adhere to the edge of the glass; pare half a lemon the same as you would an apple (all in one piece) so that the paring will fit in the wineglass; put the above ingredients into a small whiskey-glass filled one third full of shaved ice; shake up well, and strain the liquid into the cocktail-glass, prepared as above directed.

Whiskey Crust.

(Use small barglass.)

The whiskey crust is made in the same manner as the brandy crust, using whiskey instead of brandy.

Shandy Gaff.

(Use large barglass, or mug.)

Fill the glass half full of ale, and the remaining half with Irish ginger ale.

In England, where this drink had its origin, it is made with Bass' ale and ginger ale, half and half.

Half and Half.

(Use metal or stone barmug.)

Mix half old and half new ale together.

This is the American method.

"'Arf and 'Arf."

(Use metal or stone barmug.)

Mix porter or stout with ale in equal quantities, or in proportions to suit the taste.

This is the English method, and usually "draw it mild, Mary; the ale first."

Bishop.

(Use large soda-glass.)

Take 1 teaspoonful of powdered white sugar dissolved in 1 wineglass of water.
2 thin slices of lemon.
2 dashes of Jamaica rum.
2 or three small lumps of ice.

Fill the glass with claret or red Burgundy; shake up well, and remove the ice before serving.

English Bishop.

(To make one quart.)

Take 1 quart of Port wine.
1 orange (stuck pretty well with cloves, the quantity being a matter of taste).

Roast the orange before a fire, and when sufficiently brown, cut it in quarters, and pour over it a quart of Port wine (previously made hot), add sugar to taste, and let the mixture simmer over the fire for half an hour.

White Plush.

(Use small barglass.)

Hand a bottle of bourbon or rye whiskey to the customer and let him help himself. Fill up the glass with fresh milk.

A curious story about the origin of this drink is thus told by the New York *Herald*:

"There are some mixed drinks that are standbys, and are always popular, such as cocktails, punches, and juleps; but every little while there will be a new racket sprung on the public that will have a great run for a time, and then get knocked out by another. About a month ago white plush got its start in this way: There was a country buyer down from New England somewhere, and a party of dry goods men were trying to make it pleasant for him. So they took him into a swell barroom down town, and were going to open sour wine. Same old story, you know; get him full as a balloon and then work him for a big order. It turned out that this countryman was not such a flat as they thought him. Though he had been swigging barrels of hard cider and smuggled Canada whiskey for the last twenty years, he pleaded the temperance business on them; said he never drank, and he guessed he'd just take a glass of water if they'd git him one, as he was kinder thirsty walkin' round so much. Well, that was a set-back for the boys. They knew he had lots of money to spend, and he was one of those unapproachable ducks that have got to be warmed up before you can do anything with them.

"'Oh, take something,' they said; 'take some milk.'

"'Well, I guess a glass of milk would go sorter good,' said he.

"Some one suggested kumyss, and told him what it was. As they did not have any kumyss in the place they gave him some milk and seltzer. That's about the same thing. One of the boys gave the bartender a wink, and he put a dash of whiskey in it. The old man did not get on to it at all. He thought it was the seltzer that flavored it. The next round the seltzer was left out altogether and more whiskey put in. They kept on giving it to him until he got pretty well set up. It's a very insidious and seductive drink. Pretty soon the countryman got funny and tipped his glass over on the table. As it spread around he said:

"'Gosh, it looks like white plush, don't it?'

"'So it does,' said the boys. 'Give the gentleman another yard of white plush, here;' and the name has stuck to it ever since."

Kentucky Toddy.

Same as old-fashioned toddy, adding little lemon-peel.

Pony Brandy.

To serve pony brandy properly, take whiskey glass, set it on counter top downwards, place pony on top, place 1 small lump ice in a whiskey glass fill pony with only finest Cognac. Customer can take it plain or he will pour it on the ice at his option.

Rhine Wine and Seltzer.

(Use medium thin glass.)

Fill half full or little better of wine, balance Seltzer or Apolinaris. Any still wine in same manner. Ice if wanted, only in lump. Regulate according to customer's desire.

Rock and Rye.

(Use whiskey glass.)

Barspoonful rock candy syrup, small spoon in glass. Let customer help himself to whiskey. This is the best R. and R. Also honey can be used, only dissolving honey well before the liquor is poured in.

Sheridan Punch or Float.

Strain lemonade in thin lemonade-glass to within an inch of top, float over a spoon one half jigger of whiskey on lemonade.

Old-fashioned Toddy.

(Use thick glass.)

One good-sized lump sugar, dissolve with a little water, one lump ice, one jigger whiskey; stir; add nutmeg and serve in same glass.

Benedictine.

Served in the same manner as pony brandy. All Liquers served in same style except pousse-cafe.

Golden Slipper.

Put in bell-shape claret-glass half jigger yellow Chartreuse, yolk of one egg, fill with Kirsch Wasser.

To Serve Champagne.

Place the required number of Champagne-glasses on the bar filled with fine ice; take wine carefully from the ice and place on bar; remove the wire from the cork with nippers; if corded, be sure and cut all clean from neck of bottle and cork; while doing this do not remove the bottle from the bar; when done, pull the cork about one third out, wipe the lip of the bottle carefully with a clean napkin or towel, throw the ice from the champagne-glasses and draw the cork slowly; pour a little wine in each glass, then commence again with the first and pour as much as you can without having the foam run over the sides; continue this until all the glasses are filled. Always leave the bottle on the bar with the cork by its side or on the top of the bottle until the entire party have finished their wine.

Bowl of Claret Punch.

Four bottles of Claret. Dissolve in sufficient water 3 tablespoonfuls of powdered sugar for each bottle of Claret; slice in two lemons and two oranges, also some pineapple; pour in the claret; mix well, and just before serving put in one quart of domestic Champagne. Serve with square piece of ice in the bowl.

Creme de Menthe.

Fill sherry-glass with fine ice, pour in Creme de Menthe over the ice until glass is full; serve with one straw in glass.

Eggnog in Quantity.

Two and a half gallons. Separate the white from the yolks of one dozen eggs, whip them separately—the whites until very stiff, the yolks unti very thin; put the yolks in large bowl, add thre pounds powdered sugar, stirring constantly to prevent sugar from lumping, three pints brandy, on pint Jamaica aum, two gallons rich milk. Whil stirring put in an ounce of nutmeg. If not stron enough to suit, add more brandy, then put th whites on top. When serving, cut off a small quantity of white and put on top of glass with a dash of nutmeg.

Apple Brandy Cocktail.

Fill mixing glass two thirds full of ice, small barspoonful syrup, two dashes Angostura bitters, three dashes Curaçao, one jigger apple brandy. Stir well; strain in cocktail-glass.

Coffee Cobbler.

(Use large lemonade glass.)

Fill glass two thirds with ice, one dessert teaspoonful powdered sugar; fill with coffee, stir, then pour in one jigger brandy; stir thoroughly. Serve with a straw. An excellent stimulant.

Tea Cobbler.

(Use large lemonade glass.)

Made in same manner as Coffee Cobbler, using Irish whiskey instead of brandy, with a thin slice lemon added.

Snow Flake.

(Use thin glass.)

Take large thin glass half filled with sweet milk; fill up with Imperial or seltzer water; both ingredients must be cold.

St. Charles' Punch.

(Use large barglass.)

Take 1 teaspoonful of powdered sugar, dissolved in a little water.
1 wine glass of Port wine.
1 pony glass of brandy.
The juice of quarter of a lemon.

Fill the tumbler with shaved ice, shake well, ornament with fruits in season, and serve with a straw.

La Casino Fizz.

Fill lemonade glass with fine ice to cool it. Put in mixing glass two thirds fine ice, juice one quarter lemon, one barspoonful sugar, three dashes Curaçao, white of one egg; shake well, strain, fill with syphon Seltzer.

Rum Sour.

Fill mixing glass two thirds full of fine ice, juice one quarter lemon, large spoonful syrup, one jigger N. E., Jamaica or St. Croix rum; shake well. Strain in star Champagne-glass with fruit.

An Eye-opener.

In tall, thin glass put one teaspoonful Bromo Seltzer, one jigger Holland or Tom Gin (genuine), fill with club soda; drink while effervescent.

Snow Ball.

Place on the bar a large lemonade glass full of fine ice, putting in a mixing glass one half tablespoonful fine sugar, half jigger whiskey and white of one egg. Fill three fourths with fine ice; shake well and strain into the lemonade glass, after throwing out the ice; then fill with imported ginger ale.

Velvet Gaff.

One pint of Champagne, one pint of Dublin Stout, mixed in a bowl or pitcher. Serve in star Champagne glasses.

Hints on Using Ice.

Great care should be used in handling ice. Do not use the hands. Sometimes a customer asks for more ice. Use spoon or silver scoop. See that your ice is perfectly clean and properly shaved, also having some lumps arranged according to demand for different drinks.

Brandy Toddy.

Fill mixing glass two thirds full of fine ice, large barspoonful syrup, one jigger brandy; stir well and strain into previously cool cocktail glass; add a little nutmeg.

Attorney General.

(Similar to Kentucky Toddy.)

Take good-sized thick glass; two lumps cut sugar dissolve in a little water, two lumps ice, one jigger Kentucky whiskey (Laingape); stir; add one small slice lemon and little nutmeg. Serve in same glass with spoon.

Ale Sangaree.

(Use thin glass.)

Barspoonful sugar, a few drops lemon, little water to dissolve, one lump ice; pour ale in slowly. Stir carefully, filling up with the ale. Serve with a little nutmeg on top.

Porter Sangaree

(Use thin glass.)

Same as Ale Sangaree, using porter.

Whiskey Punch.

(Use lemonade-glass.)

Take quarter of a lemon, one barspoonful sugar, little water; press the lemon; one jigger bourbon or rye whiskey, fill glass with ice, two dashes rum; shake well and strain into cool stem punch-glass, add fruit. Two or three punches can be made in large glass at the same time, first filling up your stem glasses with ice for as many as required. This is one of the best ways to make a good whiskey punch.

Old-fashioned Punch

(Use medium-sized glass.)

Made with same ingredients as the foregoing, excepting to stir with spoon and serve with the ice in same glass with a strainer or straws.

Whiskey Punch.

(Chicago style.)

Take two same sized mixing glasses, fill with ice, put four dashes syrup, four dashes lemon, one jigger whiskey in one of the mixing glasses; place the other on top, reversing until cold, then strain from both into cool glass, holding them firmly; add fruit.

St. Croix or Jamaica Rum Punch.

In same manner as whiskey punch.

Cazaracino.

Dedicated to

COL. W. B. SMITH,

C. BROWN, NIC. KOSS, AND F. A. BRADLEY.

Make some lemonade, strain into pitcher, then half fill some thin glasses with ice, put in some Cazarac cognac, and fill up with the lemonade.

Bijou Cocktail.

Take ⅓ Grand Marnier.
⅓ Vermouth.
⅓ Plymouth Gin.

Mix and strain; a delicious drink. Grand Marnier can also be served in pony-glass like any liquor.

Swiss S.

Made in same manner as Absinthe Frappe, using white of egg, and well shaken, strained, and filled with seltzer.

Boston Bamboo.

Take ½ Vermouth.
½ sherry.
Bitters and syrup
Stir and strain

Horse's Neck.

(Use large, thin glass.)

Cut the whole of a lemon-peel, in a long string, place into glass, holding one end of peel, filling with ice. Put in two dashes of bitters, bottle of imported ginger ale. Some prefer a jigger of whiskey, filling with seltzer.

Four Nice After-Dinner Drinks.

No. 1. Pony brandy.

No. 2. Brandy and curacoa. Use pony, ½ of each.

No. 3. Creme Dementhe, iced.

No. 4. Pony Grand Marnier. If iced, use sherry glass.

TEMPERANCE DRINKS

Milk and Seltzer.

(Use large soda-glass.)

Fill the glass half full of milk, and the remaining half with seltzer water.

Saratoga Cooler.

(Use large barglass.)

Take 1 teaspoonful of powdered white sugar.
Juice of half a lemon.
1 bottle of ginger ale.
2 small lumps of ice.

Stir well, and remove the ice before serving.

Plain Lemonade.

(Use large barglass.)

Take the juice of half a large lemon.
1½ tablespoonfuls of sugar.
2 or 3 pieces of orange.

Shake, and serve with straws.

Egg Lemonade.

Same as plain, putting in egg only; shake longer.

Soda Cocktail.

Take lemonade-glass two thirds full of ice, one desertspoonful of sugar, two dashes Schroeder's bitters, lemon peel, bottle Trilby soda water; stir, and serve in same glass.

Apollinaris Lemonade.

(Use lemonade-glass.)

Mash one whole lemon, one large spoonful sugar, half fill with ice, fill up with the Apollinaris water; stir, and strain into thin glass, adding fruit.

Seltzer Lemonade.

In same manner as Apollinaris, using Seltzer or Imperial water, the last being a very fine water known as Wagner's Imperial.

Lemonade.

This drink, although simple in name, is very important in first class bars. One good-sized lemon, peeled, cut in half, one and one half large spoonfuls sugar, the lemon well pressed; fill glass two thirds full of ice, fill with water, and shake thoroughly. and strain carefully into thin glass, or serve with straws, adding fruit according to customer's wish. Can be made sour, and with Apollinaris or Seltzer according to order.

Soda Lemonade.

(Use large soda-glass.)

Take 1 tablespoonful of powdered white sugar.
Juice of half a lemon
1 bottle of plain sodawater.
2 or 3 small lumps of ice.

Stir up well, and serve with straws or strait

SELTZER LEMONADE may be made by substituting Seltzer water for the soda.

Egg Lemonade.

(Use large barglass.)

Take 1 large tablespoonful of pulverized white sugar.
Juice of half a lemon.
1 fresh egg.
2 or 3 small lumps of ice.

Shake up thoroughly, strain into a sodawater glass and fill up the glass with soda or seltzer water. Ornament with berries.

Orgeat Lemonade.

(Use large barglass.)

Take 1 tablespoonful of powdered white sugar.
½ wineglass of orgeat syrup.
The juice of half a lemon.

Fill the tumbler one third full of fine ice, balance water. Shake well, and ornament with berries in season. Serve.

Fine Lemonade for Parties.

(One gallon.)

Take the rind of 8 lemons.
Juice of 12 lemons.
2 pounds of loaf sugar.
1 gallon boiling water.

Rub the rinds of the eight lemons on the sugar until it has absorbed all the oil from them, and put it with the remainder of the sugar into a jug; add the lemon juice (but no pips), and pour over the whole the boiling water. When the sugar is dissolved strain the lemonade through a piece of muslin, and when cool it will be ready for use. The lemonade will be much improved by having the whites of four eggs beaten up with it. A larger or smaller quantity of this can be made by increasing or diminishing the ingredients used.

TOASTS AND SENTIMENTS.

I'll toast America's daughters—let all fill their glasses—
Whose beauty and virtue the whole world surpasses.
May blessings attend them, go wherever they will,
And foul fall the man that e'er offers them ill.

Lovely woman—man's best and dearest gift of life.

Love to one, friendship to a few, and good-will to all.

May every woman have a protector, but not a tyrant.

Here's to the man who never lets his tongue cut his own throat.

Here's to the man who never quarrels with his bread and butter.

Here's to the man who never looks a gift horse in the mouth.

HINTS FOR YOUNG BARTENDERS

1. An efficient bartender's first aim should be to please his customers, paying particular attention to meet the individual wishes of those whose tastes and desires he has already watched and ascertained; and, with those whose peculiarities he has had no opportunity of learning, he should politely inquire how they wish their beverage served, and use his best judgment in endeavoring to fill their desires to their entire satisfaction. In this way he will not fail to acquire popularity and success.

2. Ice must be washed clean before being used, and then never touched with the hand, but placed in the glass either with an ice-scoop or tongs.

3. Fancy drinks are usually ornamented with such fruits as are in season. When a beverage requires to be strained into a glass, the fruit is added after straining; but when this is not the case, the fruit is introduced into the glass at once. Fruit, of course, must not be handled, but picked with a silver spoon or fork.

4. In preparing any kind of a hot drink, the glass should always be first rinsed rapidly with hot water: if this is not done the drink can not be served sufficiently hot to suit a fastidious customer. Besides, the heating of the glass will prevent it from breaking when the boiling water is suddenly introduced.

5. In preparing cold drinks great discrimination should be observed in the use of ice. As a general rule, shaved ice should be used when spirits form the principal ingredient of the drink, and no water is employed. When eggs, milk, wine, vermouth Seltzer or other mineral waters are used in preparing a drink, it is better to use small lumps of ice, and these should always be removed from the glass before serving to the customer.

5. Sugar does not readily dissolve in spirits; therefore, when making any kind of hot drink, put sufficient boiling water in the glass to dissolve the sugar, before you add the spirits.

7. When making cold mixed drinks it is usually better to dissolve the sugar with a little cold water, before adding the spirits. This is not, however, necessary when a quantity of shaved ice is used. In making cocktails the use of syrup has almost entirely superseded white sugar.

8. When drinks are made with eggs or milk, or both, and hot wine or spirits is to be mixed with them, *the latter must always be poured on the former gradually*, and the mixture stirred briskly during the process; otherwise the eggs and milk will curdle. This is more particularly the case when large quantities of such mixtures are to be prepared. Such drinks as "English Rum Flip," "Hot Eggnog" and, "Mulled Wine" are sure to be spoiled unless these precautions are observed.

THE LATEST

Hobson Rickey.

A regular rickey, sweetened with a lump of sugar, made in an old-fashioned toddy glass.

Greenie.

Take a split glass, half filled with shaved ice, add half a jigger of creme de menthe and half a jigger of Plymouth gin; syphon with seltzer.

Suissesse.

One-half jigger of absinthe, a tablespoonful of orgeat syrup, one white of egg; put into a mixing glass, fill with cracked ice, shake; strain into a wine-glass.

Dewey Cocktail.

Fill a small glass with equal quantities of crem yvette (blue), apricotine (red), and marasch (white).

Gin Puff.

(DEDICATED TO PHIL KOELL.)

Take lemonade glass, fill ⅓ with fine ice, spoonful powdered sugar, 1 jigger of old tom o phosphate gin, fill glass with milk, shake well and strain, 1 piece of lemon peel squeezed over top. Serve.

SHALL IT BE WHISKEY OR BEER?

BEVERAGES COMPARED.

How to Tell Whether You Are Physically Better Suited to One Than the Other.

Is it better for a man to drink whiskey or to stick beer? Now, that is a very proper question for tho sands of people, and it is very important that it shou be answered correctly. If a man who ought to drin beer should confine himself to whiskey, the cons quences might be disastrous; and the same would b true when a man whom nature has marked for a whi key drinker devotes most of his bibulous energy to beer.

There is all the difference in the world between the two beverages, says a writer in the New York World. They are made, in the first place, of different materials. Beer being a sparkling beverage, is heavily charged in the process of fermentation with carbonic acid gas, while whiskey is quiet, and, in this respect, inoffensive. Beer contains very little alcohol in proportion to the whole quantity of fluid, sometimes but four percent, while whiskey contains from forty to fifty percent. Beer is therefore largely made up of water. Whiskey has very little water in its composition. Beer has a "bead," while whiskey has none. Beer is liable to spoil unless kept cold. Whiskey will keep at any temperature.

Adulterated beer is, without question, much more unhealthful than pure beer made of hops and malt, but when the healthfulness of any sort of beer is compared with whiskey, it is not so much the ingredients of the beer that enter into the question as the general character of the liquid, and the effect of great quantities of it on certain organs, especially the liver, the kidneys, and the bladder.

A man who habitually drinks beer takes a much greater quantity of liquid into his system than one who drinks whiskey. It would therefore stand to reason that if they were equally harmful, admitting that they are harmful, the beer-drinker would suffer the more. It is also important to bear in mind that there is a great difference in temperament between different individuals. A man who can drink beer in considerable quantities with little bad effect, might be easily upset by a moderate indulgence in whiskey, and so, on the other hand, there are many persons accustomed to whiskey who are injuriously affected immediately on drinking beer.

Since it would be difficult to obtain proper subjects for an experiment of this sort, it will probably answer the purpose to compare beer-drinking countries, districts, and nations, with those that drink little beer, but consume great quantities of whiskey. An opportunity for such a comparison is afforded in studying the health-statistics of the north and south of England.

The percentage of deaths in the south of England is somewhat larger, but the most curious difference between the two sections is, that while the north is comparatively free from gout and rheumatism, those diseases are very prevalent in the south. Gout and rheumatism are found to prevail especially in manufacturing cities, where much beer, porter, and ale are drunk. The same is true of the cities of Germany, whereas in Scotland and in Spain there is a happy absence of both maladies.

So striking has been the coincidence of the association of gouty disease with the habit of beer drinking that doctors have concluded there must be some pathological connection between them. It has also been found in individual cases that many patients who complain of gout have been beer-drinkers, and that they experience relief immediately on giving up this beverage.

Dr. S. Weir Mitchell declares that the safest drink is whiskey, provided there is not some objection peculiar to the individual. Probably most physicians will agree with the doctor's views generally, though they will all declare that whiskey, being strong in alcohol, should be used moderately.

The trouble with beer is that it puts a great tax on the liver and kidneys. The mere passing off of great quantities of liquid is unnatural, and when persisted in, so weakens these organs as to invite cirrhosis of the liver, Bright's disease, and other complaints.

Nevertheless, each man is a law unto himself, and after first determining to be moderate, you should find out which beverage you are suited for. One good test is to examine the tongue in the morning after drinking. If it is coated after drinking beer, and not coated after drinking whiskey, leave beer alone. If it is coated after drinking whiskey, but not after drinking beer, leave whiskey alone. If it is coated after drinking both, leave both alone.

* * *

Fizz Cocktail.

(A la T. G. Williams.)

Use medium thin glass: 1 lump of ice, a little sugar, 2 dashes of bitters, 1 jigger of Old Tom gin and fill up with seltzer, stir and serve.

Mulled Port.

(For 12 persons.)

Use large punch bowl. 5 quart bottles of port wine, 1½ lbs. sugar, 12 cloves, and 1 nutmeg grated; place in a saucepan over a fire till almost boiling, strain, and serve with ladle; also add one stick of cinnamon.

Balaklava Nectar.

(For 15 persons.)

Use large punch bowl. Peel 2 lemons and put peel in bowl; squeeze the lemon on them and add 4 table spoons of sugar, press to extract flavor, add 2 bottles of plain soda water, 2 bottles of champagne, 2 bottles of claret, stir, put in a block of ice, dress with fruit, and serve with ladle.

OLDEN TIME DRINKS

One of the favorite drinks in olden times was that called "Lamb's Wool," which derived its name from the 1st of November, a day dedicated to the angel presiding over fruits and seeds, and termed "La masubal," which has subsequently been corrupted into "lamb's wool."

Recipe for Lamb's Wool.

To one quart of strong hot ale add the pulp of six roasted apples, together with a small quantity of grated nutmeg and ginger, with a sufficient quantity of raw sugar to sweeten it; stir the mixture assiduously, and let it be served hot.

Of equal antiquity, and of nearly the same composition, is the Wassail Bowl, which in many parts of England is still partaken of on Christmas Eve, and is alluded to by Shakspeare in his "Midsummer Night's Dream." In Jesus College, Oxford, we are told, it is drunk on the Festival of St. David, out of a silver-gilt bowl holding ten gallons, which was presented to that College by Sir Watkin William Wynne, in 1732.

Recipe for the Wassail Bowl.

Put into a quart of warm beer one pound of raw sugar, on which grate a nutmeg and some ginger; then add four glasses of sherry and two quarts more of beer, with three slices of lemon; add more sugar, if required, and serve it with three slices of toasted bread floating in it.

Another genus of beverages, if so it may be termed, of considerable antiquity, comprise those compositions having milk for their basis, or, as Dr. Johnson describes them, "milk curdled with wine and other acids," known under the name of Possets—such as milk-possets, pepper-posset, cider-posset, or egg-posset. Most of these, now-a-days, are restricted to the bed-chamber, where they are taken in cases of catarrh, to act as agreeable sudorifics. They appear to us to be too much associated with tallow applied to the nose, to induce us to give recipes for their composition, although in olden times they seem to have been drunk on festive occasions, as Shakspeare says—

> "We will have a posset at the end of a sea-coal fire;"

and Sir John Suckling, who lived in the early part of the 17th century, has in one of his poems the line—

> "In came the bridesmaids with the posset."

The Grace-cup and Loving-cup appear to be synonymous terms for a beverage, the drinking of which has been from time immemorial a great feature at the corporation dinners in London and other large towns, as also at the feasts of the various trade companies and the Inns of Court—the mixture of which is a compound of wine and spices, formerly called "Sack," and is handed round the table, before the removal of the cloth, in large silver cups, from which no one is allowed to drink before the guest on either side of him has stood up; the person who drinks then rises and bows to his neighbors. This custom is said to have originated in the precaution to keep the right or dagger hand employed, as it was a frequent practice with the Danes to stab their companions in the back at the time they were drinking. The most notable instance of this was the treachery employed by Elfrida, who stabbed King Edward the Martyr at Corfe Castle whilst thus engaged.

Beer Cups.

These cups should always be made with good sound ale, but not too strong; and should invariably be drank from the tankard, and not poured into glasses, as they are generally more agreeable to the taste than to the sight, and it is imperative that they should be kept hot.

Hot Ale Cup.

To a quart of ale, heated, add two wine-glasses of gin, one wine-glass of sherry, two tablespoonfuls of American bitters, plenty of cloves and cinnamon, and four tablespoonfuls of moist sugar.

Copus Cup.

Heat two quarts of ale; add four wine-glasses of brandy, three wine-glasses of noyeau, a pound and a half of lump sugar, and the juice of one lemon. Toast a slice of bread, stick a slice of lemon on it with a dozen cloves, over which grate some nutmeg, and serve hot.

"Burnet" Cup.

A pint of Scotch ale, a pint of mild beer, half a pint of brandy, a pint of sherry, half a pound of loaf sugar, and plenty of grated nutmeg. This cup may be drank either hot or cold.

Burgundy Cup.

To a bottle of Burgundy wine add a wine-glass of noyeau, three wine-glasses of pine-apple syrup, one wine-glass of brandy, and a quarter of a pound of powdered sugar. Ice well: add a bottle of seltzer or soda-water before drinking, and serve with a sprig of borage.

Mulled Claret.

The best way of mulling claret is simply to heat it with a sufficient quantity of sugar and a stick of cinnamon. To this a small quantity of brandy may be added, if preferred.

Champagne Cup.

To a bottle of champagne add a wine-glass of Madeira or sherry, a liquor-glass of Maraschino, two slices of Seville orange-peel, and one slice of lemon-peel. Before drinking, pour in a bottle of seltzer-water, and serve with a sprig of verbena or a very small piece of thinly-cut peeling of cucumber

Moselle Cup.

To a bottle of Moselle add a sweet orange sliced, a leaf or two of mint, sage, borage, and the black currant. Let this stand for three hours; strain off, and sweeten to taste with clarified sugar.

Hock Cup.

To a bottle of hock add three wine-glasses of sherry, one lemon sliced, and some balm or borage. Let it stand two hours; sweeten to taste, and add a bottle of seltzer-water.

WINE

The word "wine," in its wildest sense, includes all alcoholic beverages derived from sacchariferous vegetable juices by spontaneous fermentation. In the narrower sense of its ordinary acceptance, it designates the fermented product of grape juice, with which alone the present article proposes to deal. Wine making is an easy art where there is a sufficient supply of perfectly ripe grapes. In Italy, Spain, Greece, and other countries of Southern Europe, nature takes care of this. In the more northern districts of France, and especially on the Rhine in Germany, the culture of the vine means hard work from one end of the year to the other, which only exceptionally finds its full reward. And yet it is in those naturally less favored districts that the most generous wines are produced. Southern wines excel in body and strength, but even the best of them lack the beautiful aroma or bouquet characteristic of high-class Rhine wine. The large proportion of sugar in southern grape juice would appear to be inimical to the development of that superior flavor. To secure the highest attainable degree of maturity in the grape, the vintage on the Rhine is postponed nutil the grapes almost begin to wither, and the white grapes on the sunny side of the bunches exhibit a yellowish brown (instead of a green) color, and show signs of flacidity. In Spain, France, and Portugal it is a very common practice to dust over the grapes with plaster of paris, or to add the plaster to the must. The intention is to prevent putrefaction of the berries in the latter, to add to the chemical stability of the wine.

Effervescing or Sparkling Wines.

These wines are largely impregnated with carbonic acid, engendered by an after-fermentation in the closed bottle by means of added sugar.

The art originated in Champagne, where the best sparkling wines are produced, and whence it has spread to the Rhine, the Moselle, and other districts. A champagne which contains relatively little sugar is called "dry"; it is chiefly this kind which is imported into Great Britain, where champagne is used habitually principally as a dinner wine; inFrance a sweet wine is preferred. At the presentday wine is practically a European product, although a certain quantity is made in the United States, at the Cape of Good Hope, and in Australia.

France shows to-day, and has during several isolated seasons the past twenty years, shown herself to be the most remarkable wine-producing country country in the world's history, and this in face of the fact that the United States and Italy, with more territory suitable to grape-growing, and with wonderful natural advantages—and why? because she has taken advantage of her fitness of soil to the vine; her meteorological conditions; her geographical positions as regards the European markets, and incidentally those of the world, and partly to the aptitude of its inhabitants, that France developed the position which it now holds.

Spain is second only in reputation to France among wine-growing countries; its white wine, known as sherry, first brought it into prominence. Sherry, so called from the town of Jerez (Xeras) de la Frontera, the headquarters of this industry. There are several different varieties of sherry, which may be divided into the Amontillado and Manzanilla classes. The Amontillado class may again be divided into *fino* and *oloroso*, the former being the more delicate. The generous, full flavored wines known as Port, are the produce of the district of Alto Douro, in the northeast of Portugal, and thence shipped to and from Oporto.

Home Industry.

In our own country the cultivation of the vine has made rapid progress of late years, and American wines are steedily taking the place of the foreign product. The soil and climate of the Pacific Coast seem best adapted to the growth of the vine, and wine making is very likely to become one of the leading industries of California. The Mission grape (being the first) is supposed to have been imported from Mexico by the Franciscan fathers about the year 1769. Subsequently varieties of French, German, and Spanish wines were introduced into the state. In Ohio upon the shores of Lake Erie and along the Ohio river the vine is extensively cultivated. The champagnes and clarets made in the neighborhood of Sandusky and Cleveland are produced in considerable quantities.

New York, Missouri, Illinois, and Pennsylvania are likewise large producing states, the largest wine manufacturing establishment being in New York State, Steuben County. The total annual production of wine in the United States now amounts to about 35,000,000 gallons.

The Qualities of Good Wine

In the 12th century are thus singularly set forth: "It should be clear like the tears of a penitent, so that a man may see distinctly to the bottom of the glass; its color should represent the greenness of a buffalo's horn; when drunk, it should descend impetuously like thunder; sweet-tasted as an almond; creeping like a squirrel; leaping like a roebuck; strong like the building of a Cistercian monastery; glittering like a spark of fire; subtle like the logic of the schools of Paris; delicate as fine silk; and colder than crystal." If we pursue our theme through the 13th, 14th, and 15th centuries we find but little to edify us; those times being distinguished more by their excess and riot than by superiority of beverages or the customs attached to them. It would be neither profitable nor interesting to descant on scenes of brawling drunkenness which ended not unfrequently in fierce battles; or pause to admire the congregation of female gossips at the taverns, where the overhanging sign was either the branch of a tree, from which we derive the saying that "good wine needs no bush," or the equally common appendage of a besom hanging from the window, which has supplied us with the idea of "hanging out the broom." The chief wine drunk at this period was Malmsey, first imported into England in the 13th century, when its average price was about 50s. a butt; this wine, however, attained its greatest popularity in the 15th century. There is a story in connection with this wine which makes it familiar to every schoolboy, and that is the part it played in the death of the Duke of Clarence. Whether that nobleman did choose a butt of Malmsey, and thus carry out the idea of drowning his cares in wine, as well as his body, matters but little, we think, to our readers. We may, however, mention that although great suspicion has been thrown on the truth of the story, the only two contemporary writers who mention his death, Fabyan and Comines, appear to have had no doubt that the Duke of Clarence was actually drowned in a butt of Malmsey. In the records kept of the expenses of Mary, Queen of Scots, during her captivity at Tutbury, we find a weekly allowance of Malmsey granted to her for a bath. In a somewhat scarce French book, written in the 15th century, entitled 'La Legende de Maitre Pierre Faiferi,' we find the following verse relating to the death of the Duke of Clarence:—

> "I have seen the Duke of Clarence
>   (So his wayward fate had will'd),
> By his special order, drown'd
>   In a cask with Malmsey fill'd.
> That that death should strike his fancy,
>   This the reason, I suppose:
> He might think that hearty drinking
>   Would appease his dying throes."

wine called "Clary" was also drunk at this period. It appears to have been an infusion of the herb of that name in spirit, and is spoken of by physicians of the time as an excellent cordial for the stomach, and highly efficacious in the cure of hysterical affections.

Sir Launcelot Sparcock, in the "London Prodigal," says—

> "Drawer, let me have *sack* for us old men;
> For these girls and knaves small wines are best."

In all probability, the sack of Shakespeare was very much allied to, if not precisely the same as our sherry; for Falstaff says, "You rogue! there is lime in this sack too. There is nothing but roguery to be found in villainous man; yet a coward is worse than sack with lime in it." And we know that lime is used in the manufacture of sherry, in order to free it from a portion of malic and tartaric acids, and to assist in producing its dry quality. Sack is spoken of as late as 1717, in a parish register, which allows the minister a pint of it on the Lord's day, in the winter season; and swift, writing in 1727, has the lines—

> "As clever Tom Clinch, while the rabble was bawling,
> Rode stately through Holborn to die of his calling,
> He stopped at the 'George' for a bottle of sack,
> And promised to pay for it when he came back."

He was probably of the same opinion as the Elizabethan poet, who sang—

> "Sacke will make the merry minde be sad,
> So will it make the melancholie glad.
> If mirthe and sadnesse doth in sacke remain,
> When I am sad I'll take some sacke again."

The Art of Drinking Wine.

To know how to drink wine belongs only to a cultivated taste; to know how to tempt guests to indulge in it with pleasure belongs only to the host gifted with rare tact and artistic discrimination.

A painting from the hand of a master must be placed in a favorable light and with appropriate surroundings to set off its excellence; the most beautiful woman despises not the art of enhancing her charms by harmonious auxiliaries or by judicious contrasts.

There is, in the same manner, an art and a science in drinking celebrated wines.

After studying the menu one can decide on a choice of wines, and on the order in which they are to be served.

The following rules should be observed.

With Fish: White Wines. With Meats: Rich Red Wines.
At the Conclusion of the repast: The Oldest Red Wines.
After the desert: White, Sweet and Sparkling Wines.

In regard to the gradation of red wines the rule is to commence with the newest and least celebrated.

We shall see how these rules are followed by a generous liver:

A few spoonfuls of soup, by their agreeable warmth, prepare the palate and stomach to fulfill their wholesome functions; a drop of golden Madeira or of old Sherry gives these organs all the necessary activity.

With the oysters, which are followed by the fish, come the fine Moselle and Rhine Wines, and the white Bordeaux or white Burgundy wines, half dry or sweet, far preferable to Champagne Frappe. When the fish and oysters are removed, so are the wines.

When meat is on the table, the proper accompaniment is the red Bordeaux wine, mellow and rich, clad in splendent purple and with a perfumed bouquet.

With Canvas Back, Mallard and Teal Duck, richer meats—roat beef, wild boar, roebuck—is served excellent heady, rich red Burgundy.

When midway in the feast, the guests have arrived at that satisfactory stage when the stomach, still docile, manifests no further desires; when the taste, prepared by a judicious gradation of sensations, is susceptible of the most delicate impressions, the noble red Bordeaux wines make their triumphal entry, and the "maitre d'hotel" proudly announces their illustrious names: Chateau Margaux! Chateau Lafite! Chateau Latour! Chat. Haut Brion! Chat. Larose!

After these wines, one can enjoy sweet Sauterne and quaff a few glasses of foaming Champagne.

HOW WINES SHOULD BE SERVED.

Wines should be always served in dry glasses.

Ordinary wines for daily use, fine ones for gala occasions.

The use of fine wines at the table and in families is a science and a fine art. White wines go with fish; with meats, the rich red wines; between the meal proper and dessert, the oldest red wines procurable. After dessert, rich white and sparkling wines.

White Wines.—Place the bottle upright in the coolest spot available, but not in contact with ice, nor let it suffer from the cold.

Rhine and Moselle.—All Rhine and Moselle wines should be drank slightly cold.

Claret and Burgundy.—Place bottles upright in the warm dining-room a day before using. Decant the wine carefully just before serving. Ice—never.

Champagnes should be thoroughly cold when served. The Brut, however, should not be quite as cold as the Dry. A very low temperature destroys their fine bouquet and delicacy. Never mix champagne with ice or water.

Ports.—Store bottles on end on a shelf in a moderately cool room or cellar. The wine being warm and generous, should not be drank cool. Port wine is not a mere luxury; it has high medicinal properties.

Sherries and Madeiras.—Bottled Sherries and Madeiras may be stored upright the same as Port, but are best when cool.

All wines should be stored in a cool place, lying down.

When wine is received it should be placed in a cellar or room where a normal temperature of from 55 degrees to 65 degrees Fahrenheit is maintained, and bottles should be laid so that contents cover the cork, thus completely preventing the admission of air into the bottle. Hence the advisability of uncorking only such quantities as can be consumed.

Sweet wines, unlike dry wines, can be consumed at leisure, and they retain their excellent qualities for an indefinite period after the cork is drawn. In using wines for medicinal purposes it should be borne in mind that the proper time is while eating, and not before or after meals. All wines, when pure, more especially the red class, after remaining in bottles over six months, show a sediment; this is a natural deposit, and greatly improves the quality.

THE WINE CELLAR

Ports and Sherries—Store bottles on end on a shelf in a moderately cool room or cellar. The wine being warm and generous, should not be drank cold.

Port wine is not a mere luxury: it has high medicinal properties. It is a tonic, and it has greater or less astringency according to the various growths and vintages. The wine derives its name from the city of Oporto, located where the river Douro enters the sea, and the wild, mountainous country through which this boisterous river dashes is the place of growth of this wine; the vineyards extending in terrace upon terrace from the edge of the river to the top of the highest mountain in the "Alto Douro" district of Portugal.

There is a prevailing notion that genuine ports are not obtainable. If invalids and convalescents knew of the splendid tonic and building-up properties of our real ports, they would not be slow in obtaining them. We advocate only wines of the highest merit. Fine Old Port, Sherry, Burgundies, Clarets, Madeira, pure California Wines, Sauternes, and Champagnes.

There are wines grown in Spain resembling port, such as the "Tarragonas"; and in France is made a wine resembling port, known as the "Roussilion," but a much better substitute than either of these is the pure port wines of Southern California grown from the same varieties of grapes as are native to the Alto Douro district.

The word "sherry" is a corruption of Jerez (or Xerxes)—Jerez de la Frontera, situated in the midst of vineyards covering a tract of country twelve and one half miles long by ten miles broad, in Andalusia, the proper home of this wine. The term "bodega" originates here. It means a lofty, capacious storehouse, a substitute for a cellar, divided into from three to six aisles by rows of pillars, well lighted and ventilated; the rays of the fierce southern sun being carefully excluded by shutters or blinds of esparto. Many of these bodegas are so long that 100 butts of wine lie side by side in the row, and as these rows are composed of tiers three and four butts high, some idea may be formed of the number of butts housed beneath a single roof. Sherries are remarkable in that the better grades develop with age a great variety of flavors; indeed, it has been asserted that no two butts of wine from the same vineyard or vintage will be alike, each one possessing different characteristics, although pressed from the same grape. From ten to twenty percent of the vintage will become irremediably bad. Of the rest some wines remain *Vinos finos*, pale, dry, soft, delicate and fresh tasting; others passing through the *finos* stage attain the dignity of *Amontillados*, stouter, dryer, more pungent and possessing a marked etherous flavor. Others develop into *Oloroso*, the classic wine of Jerez, darker, fuller, richer and mellower, with a nutty flavor and an exquisite bouquet. When they are four years old they are admitted to the dignity of forming a part of the "Sölera."

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This solera system is peculiar to Jerez. It means the building up new wines on the foundation of old ones. As the older wines are drawn off for shipment—and but a few gallons are drawn from each butt in the lowest tier—these butts are replenished from the casks immediately above them, these in turn from the next tier, and finally new wine of the same character is replenished to the top row. By this system it is possible for the shipper to keep up a uniform excellence of his wines, and to duplicate each shipment despite a succession of bad vintages. There are other districts surrounding Jerez where good wines are grown. The pale, delicate Manzanilla is grown around the little town of San Lucas de Barrameda, about fifteen miles from Jerez, and Puerto de Santa Maria yields somewhat inferior wines to the neighboring districts mentioned.

The Medoc.—The vineyards of the Medoc, whence come the most famous wines of the world, present many wonderful facts. The grapes are curious in variety, as also in their size and appearance, consequently also in the quality of the wine produced.

An extraordinary fact it is that a narrow lane sometimes divides a vineyard so that on one side there will be a first-class production, while its opposite neighbor has hardly a name with the wine buyers. The same mode of cultivation will not remedy this caprice of nature. Sometimes a trifling slope of the ground, varying a little the exposure of the plant, will cause a perceptible difference in the flavor of the fruit. The vines themselves are never suffered to grow more than three feet in height, careful pains being taken by the vine dresser to maintain quality at the expense of quantity.

It is a peculiar feature of the wines of the Bordelaise that you will rarely, if ever, find a connoisseur who will confess an undivided and exclusive attachment to any one particular growth. The claret drinker flits from vineyard to vineyard without being able to fix his affection once and forever. Not so on the Rhine. There are found the partisans, each one of whom enthusiastically lauds his particular favorite.

Clarets are gently stimulating, perfectly wholesome, and possess the inestimable property of building up bone and muscle of the human frame. The higher grades are classified into five Crus. Thereafter come the wines of "Bourgeois" and "Artisan" growths. The last named are not suitable for exports, but are consumed by the peasants and laboring classes.

Champagnes.—Champagne, as everybody knows, takes its name from the French province in which it is produced, but everybody does not know that Sparkling Champagne was the discovery of a monk belonging to the royal monastery of St. Pierre at Hautvilliers. His name was Father Perignon, and he died in 1715. The chief depots of Champagne are at Ay, Epernay and Rheims, where the quantity kept in stock is exceedingly large. The sparkle, or "mousse," as the French term it, which characterizes Champagne, is produced by the development of carbonic acid gas from the saccharine constituents of the grape juice, and is sometimes assisted in bad years by the addition of sugar to the fermenting wine. Afterward, when the wine has fermented in the cask until the spring, it is bottled. In the bottle slight fermentation continues, and a sediment is formed, which is adroitly thrown out shortly before the wine is required for the market, and this process is termed "disgorging." The wine then receives a certain quantity of liqueur, composed of the finest cane sugar dissolved in old still wine. Champagne merchants have each their own views as to the quantity of liqueur which ought to be used, and this again is made to vary to suit the fancied requirements of different markets. "Extra Dry" Champagne contains less of the saccharine admixture than "Dry," and "Brut" should contain none whatever.

The best vintages have been 1874, 1880, 1884, 1887 and 1889. The London champagne buyers whenever there is a choice vintage, buy it and take it to London, so that the greater portion of good Champagnes are only to be found there.

Heretofore the wines shipped to America have been much sweeter than those used in London, but now Extra Dry or Brut Wines are becoming more popular here every day. Champagnes for the English market, and generally called "Brut," contain from one to two percent liqueur.

The best Rhenish wines are produced in what the Germans term the Rheingau, a region of hills on the right bank of the Rhine, about twenty-five miles in length, extending from Walluf to Loch. In the middle of this district is the Schloss Johannisberg, given by the Emperor of Austria to the late Prince Metternich. In the Rheingau are produced, among other wines, the celebrated Rudesheimer, Marcobrunner and Hochheimer, from the latter of which the English word "Hoch" is supposed to be derived. On the left bank of the Rhein is Rheinhessen, where Niersteiner and other well-known wines are grown. All Rhein wines have marked chemical characteristics; they contain but little sugar, and the proportion of alcohol rarely exceeds twelve parts in a hundred, hence their great value medicinally, especially to those who are troubled with gout. The sparkling wines of the Rhein are comparatively of recent date. Their process of manufacture resembles that of Champagne.

BURGUNDIES.

The wines of the Province of Burgundy are both red and white, and are grown in the departments of the Cote d' Or, the Yonne and the Soane-et-Loire.

The Burgundy district commences about a hundred miles southeast of Paris, on the road to Dijon. Hills of chalk form the soil on which the vineyards are planted, and the vines are trained on sticks about three feet long.

Burgundy wines are famous for their delicacy, piquancy, fragrance, richness of flavor and medicinal tonic properties. The white wines—of which Montrachet stands first in rank, and Chablis is the best known—are famous for luncheon and dinner purposes, Chablis being especially agreeable with oysters.

The different kinds of wine may well be spoken of as follows:

Macon.—A sound, pure wine, with excellent body and flavor; a splendid dinner wine.

Pommard.—A choice wine of the Cote-d'Or. It is full, rich and delicate in flavor.

Beaune.—An acceptable and strong good wine for invalids who may be ordered to drink good Burgundy in preference to any other.

Nuits.—An exceedingly nutritious wine, with great flavor, and a decided bouquet, smooth and agreeable.

Romanee.—The most delicious and exquisite of red Burgundies.

Clos De Vougeot.—Paramount among red Burgundies as being the perfect, unsurpassable wine of its class. The vineyard producing it is held in high esteem by all Frenchmen.

Chambertin.—A famous red Burgundy of the very highest class, wonderfully soft and delicate, with brilliant ruby color. The wine is prized as most choice by those who, in matters of wine, are cognoscenti.

The Portuguese word "Madeira" means "wood," and the name was given to the island when first discovered, on account of its being covered with a dense forest. The culture of the grape commenced in Madeira early in the fifteenth century. The vines are trailed on frameworks of cane, and grow in ashy soil, the island being volcanic. Madeira wine is very rich, full-bodied and aromatic. A voyage to the East or West Indies improves its condition in a wondrous degree.

Moselle Wines.

I wish to direct attention to these wines. I think that they are not appreciated as highly as they should be here. They are light and less rich than the Rhine wines, and very wholesome. For drinking with oysters and all sorts of fish there are none finer.

The wines produced on the banks of the Moselle were famous before those of the Rhine had gained celebrity. Those which are most celebrated are grown on the lower Moselle, between Treves and Coblentz. Moselle is a very bright wine, and should have a greenish yellow color, with muscatel flavor, and peculiarly pleasant aroma. It is regarded as one of the most wholesome of wines, for, being cool and dry, it refreshes without unduly heating the system. Sparkling Moselle has of late years come very much into favor.

Wines of California.—The fact that California now produces over one half of the wine consumed in the United States is evidence of the rapid stride this young state is making in viticulture. The errors that have been made in the past by growers have naturally resulted in good, and ambitious viticulturists, profiting by such experience, are coming forward with wines which, while distinctly Californian, are destined to become known among connoisseurs and recognized as high types of a new class.

To those who are unacquainted with this progress of the past few years we will show wines of high quality, particularly of the dry wines from the northern part of the state, some of which suggest the finer red wines of Hungary and others the products of the choicer sections of France. It is as California wines that they should be judged however, for while having these resemblances they are a separate and distinct class.

With the ambition and enthusiasm of youth, a far-famed climate showing great variety in the different sections, and much foot-hill land of suitable soil, the Golden State may be expected some day in the not far distant future to take high rank in the production of wine.

How to Manage Wine and Beer.

All wine, particularly light-bodied and sparkling, require to be kept on their side and at a uniform temperature of 55 degrees. Claret, Burgundies, and also white wines should be decanted very carefully in removing them from the bin when about to be used, otherwise the deposit is liable to become mixed with the liquid, and the flavor destroyed. Old bottled wines will lose many of their properties *unless carefully* decanted.

Wine old in bottles should be drunk immediately on being decanted. If allowed to remain open for any length of time the delicate aroma, so much esteemed, will be lost, and the wine become vapid.

All aerated waters should have their corks kept damp, and be placed cork downwards.

Bottled stout and ale should be placed cork upwards; when required for use they should be moved carefully, and the whole poured out without putting down the bottle, otherwise the sediment will be shaken into the liquor.

Draught stout or beer when tapped, if wanted for quick use, should have a porous vent peg put in the bung, and left a short time to clear; if the draught is slow, give it time to fine without venting.

The beer cellar should be lofty, dry, and well ventilated.

Mean and adulterated drinks supply the temperance fanatics with their most powerful arguments, and if it were possible to abolish the manufacture and sale of these abominable concoctions there would be less need for restriction of the traffic. When such whiskeys as are put upon the market, and which for years have proved all that is claimed for them—a bland ripe, and delicious whiskey, that has few equals, the favorite with *bon vivant* and medical practitioner alike—then it is a friend, supplying thousands with the means of maintaining health and strength and enjoyment.

The mistaken treatment of diluting claret with ice water develops all its rough flavor and crude properties.

The O-neh-da Vineyard, Rochester, N. Y., was organized and is conducted by Monseigneur McQuaid, bishop of that city. The property, it is said, belongs to the Rochester Seminary, of which he is the head. Several years ago the bishop spent several weeks in the white wine district near Bordeaux, studying the making of sauternes.

If the whiskey dealers allow the whiskey sold over the bars to deteriorate, while the other alcoholic beverages sold far cheaper improve in quality, they must expect to lose business very rapidly.

Wines of Hungary and Austria.—The wines of Hungary, with the exception of Tokay, rank with the most inexpensive wines of Europe, quality considered. They are medicinal in a marked degree, promoting digestion and being particularly rich in phosphoric acid.

The lighter red wines resemble somewhat the clarets of the Medoc, as do the richer wines bear resemblance to those of Burgundy, and the white wines might be compared with the product of the Rhinegau, but they possess marked independent characteristics and have the generous but fiery individuality of the Magyar race which produces them.

Wines of Italy.—Italy is the largest wine-producing country in the world, the annual product being over nine hundred millions of gallons. Vineyards extend throughout the length and breadth of the land, from the foot of the Alps in the north to the southernmost Sicily. Spain takes second place in the annual yield of wine, but France is not far behind Spain in quantity, whereas in point of value of its annual vintage France eclipses every other country.

HEALTH AND ALCOHOL

The British Medical Association, moved by the outcry against the use of alcoholic drinks, and wishing for some definite and reliable information as to the influence of alcohol on the duration of life, appointed a commission not long ago to gather statistics in the premises. The observations made included 4234 cases of deaths in five classes of individuals, and here are the results in the average age attained by each case: Total abstainers, 51 years and 1 month; moderate drinkers, 63 years and ½ month; occasional drinkers, 59 years and 2 months, habitual drinkers, 57 years and 2 months; drunkards, 53 years and ½ month. It appears that moderate drinkers live longer than anybody else, and total abstainers are the shortest lived.

WHISKEY

Whisky or whiskey, a spirit distilled for drinking, which originated, at least so far as regards the name, with the Celtic inhabitants of Ireland and Scotland, and its manufacture and use still continues to be closely associated with those two countries.

Distilled spirit first became popularly known as aqua vitæ, and it was originally used only as a powerful medicinal agent. It was not till about the middle of the 17th century that it came into use in Scotland as an intoxicating beverage. It is only the finer qualities of matured malt and grain whiskey that can be used as simple or unblended spirit. In the United States whiskey is distilled chiefly from corn and rye, wheat and barley malt being used, though only to a limited extent. Whiskey is greatly improved by age; it is not mellow, nor its flavor agreeable until it is several years old. Whiskey seems to be the most favored drink in America fo purposes of stimulation, and in uncertain moments when one is undecided as to what to take it is gen erally regarded by steady drinkers as the purest an most reliable drink. They appear to know goo whiskey by the taste of it.

BREWING

Is the art of preparing an exhilarating or intox cating beverage by means of a process of ferment tion. In the modern acceptation of the wor brewing is the operation of preparing beer and al from any farinaceous grain, chiefly from barle which is at first malted and ground, and its ferme able substance extracted by warm water. T infusion is evaporated by boiling, hops having be added to preserve it. The liquor is then ferment The art was known and practiced by the Eg tians many hundred years before the Christian and afterward by the Greeks, Romans, and anci Gauls, from whom it has been handed down to All countries, whether civilized or savage, have every age, prepared an intoxicating drink of s kind. Great care must be taken when buying malting, for sometimes the grain is doctored kiln-bleaching, or dried at too great a heat. eral samples, too, may be mixed, in which case will not grow regularly, as heavier barley gene requires to be longer in steep; and the grains, br by the drum of the threshing-machine being s close, spoil a sample. Those cut into sections not germinate, but in warm weather putrefy, evident from their blue-gray and moldy appea and offensive smell while germinating. A buyer will, by the use of a skillful hand est very closely the weight per bushel in bulk. His eye will tell him if the grain has been cut before being ripe, in which case there will be a variety in the color of the barley-corns, some being bright and some a dead, grayish yellow. In consequence of being sown in spring, and not undergoing the equalizing tendency of winter, barley is, of all grain, the most liable to ripen in a patchy manner, and not come to perfection simultaneously. The buyer has also to judge if it has been heated, or "mow-burnt," while lying in the field after being cut, or in the stack.

THE COOK IS KING.

We may live without poetry, music, and art;
We may live without conscience, we may live without heart;
We may live without friends, we may live without books,
But civilized man can not live without cooks.
We may live without books; what is knowledge but grieving?
We may live without hope; what is hope but deceiving?
We may live without love; what is passion but pining?
But where is the man that can live without dining?

LUCILLE-OWEN MEREDITH

PUNCHES AND SHERBETS FOR THE DINNER TABLE

NOTE. Punch or Sherbet is served between the last entree and game or roast. The difference between Sherbet and Punch is that the former is a water Ice, into which some liquor is mixed, while Punch is an Ice, either of water or cream mingled with some Italian Meringue and liquors.

Banana Frappe.

Mash two bananas to a pulp; mix with juice of one lemon, one cup sugar, one cup water, one teaspoonful vanilla extract. Rub through strainer. Put all together in freezer and freeze till it begins to thicken, then add the white of one egg beaten to stiff froth. Freeze firm.

NOTE: Any kind of Frappé can be made by substituting other fruit for bananas.

Fruit Mousses,

With Pineapple or other Fruit.

Strawberries, raspberries, apricots, peaches, pineapples, etc., to be used.)

One quart of cream must be whipped till very light; drain it on a sieve and then transfer it to a bowl. Add one pound pineapple puree and one pound of sugar, mixing both together with a little vanilla and a gill of Kirsch. Whip the preparation in a tin basin on ice for ten minutes to have the cream and pulp assimilate well together. Coat the inside of a high dome mold with Virgin Strawberry Cream; fill the center quite full with the preparation, and close the mold. Pack in ice for one hour, unmold on a napkin, and surround with small iced cakes.

Any other fruit may be substituted for the pineapple.

Virgin Strawberry Ice Cream.

Add three pints sweet cream and a pint of milk to one quart of strawberries and two pounds of powdered sugar. Melt the sugar. Strain the whole through a silk sieve and freeze.

Imperial Punch.

Put three gills of pineapple juice in a vessel with the juice of two lemons and the peel of one orange; also one half ounce of tea infused into a pint of water, three gills rum, two gills brandy, one gill Kirsch, one gill Maraschino. Bring this to 16°. Then freeze. When frozen, add one half as much ice.

Regent Punch.

Take 1 quart water.
1 pint gin.
2 lemons.
1 pound sugar.
1 pint maraschino.
4 bottles club soda.

Grate the rind of lemon into a bowl, moisten with some gin and rub with the back of a spoon to extract flavor; add the lemon juice and the rest of ingredients, except soda. Strain into the freezer and freeze as firm as the spirit will allow. Add the bottled soda and finish freezing.

Victoria Punch.

Take 6 or 8 oranges.
12 lemons.
3 pounds of sugar.
8 whites of eggs.
2 pounds of water.
1 pint of sweet wine.
½ pint rum.

Grate the rinds of half the lemons into a bowl, add the rum, and rub with the back of a spoon to extract the flavor. Squeeze in the juice of all the fruit, add other ingredients and freeze. Then whip the whites, stir in; beat up; and freeze again.

Turkish Sherbet.

Take 1 quart sweet wine.
1 quart water.
2 pounds of sugar.
2 lemons—juice only.
6 oranges—juice only.
8 ounces blanched almonds.
8 ounces muscatel grapes.
4 ounces figs, cut small.
4 ounces seedless raisins.
8 whites of eggs.
6 cloves, a small piece of cinnamon and a little caramel coloring.

Make a hot syrup of the sugar and water and pour it over the raisins, cloves and cinnamon. When cool add orange, lemon juice and wine. Strain and freeze in the usual manner. Take out the spices and add the scalded raisins, figs, grapes and almonds last.

Maraschino Punch

Take 2 pounds of sugar.
3 pints water.
2 lemons—juice only.
2 oranges—juice only.
1 pint Maraschino.
6 whites of eggs, whipped.

Mix the sugar, water and juice of punch together; strain, freeze, add the whipped whites and beat up.

Champagne Punch.

Same as Maraschino, substituting Champagne for Maraschino.

Russian Punch.

Take 1 quart Black Tea made as for drinking.
1 pint water.
1 pint Port Wine.
½ pint Brandy.
1½ pounds of sugar.
3 lemons.
Little caramel to color.

Cut the lemons in small slices in a bowl, make a boiling syrup of the sugar and water; pour over and let stand till cold. Add tea, liquor, strain, and then freeze. Keep lemon slices on ice and mix in when frozen.

Roman Punch.

Take 4½ quarts water.
3½ pounds of sugar.
3 pints Jamaica Rum.
6 or 8 lemons.

Grate rinds of lemons and use juice; freeze in the usual manner.

COFFEE THAT IS GOOD

To make good coffee is apparently not so simple as it may seem, if general results count for anything. The coffee served at some of the best restaurants testifies to this, and even the home-made morning cup of coffee is seldom perfectly satisfactory. A writer in the London Lancet deplores the fact that a good cup of coffee is so seldom found, and declares that there should be no difficulty in making it, and recommends that the simplest way is the best. There is no better stimulant in the morning than a delicious cup of coffee, and there is no better way of preparing it than according to the following recipe: Do not buy the coffee already ground, for it loses its fine flavor more rapidly when in the ground form than when whole. Have a small coffeemill and grind it yourself.

A mixture of two or more kinds of coffee will give the most satisfactory result. Two thirds Java, with one third Mocha, will make a rich, smooth coffee. Now for the recipe: Put one cupful of roasted coffee into a small fryingpan, and stir it over the fire until hot, being careful not to burn it. Grind the coffee rather coarse and put it in a common coffeepot. Beat one egg well, and add three tablespoonfuls of cold water to it. Stir this mixture into the coffee. Pour one quart of boiling water on the coffee, and place the pot on the fire. Stir the coffee until it boils, being careful not to let it boil over; then place on the back of the stove, where it will just bubble, for ten minutes. Pour a little of the coffee into a cup, and return it to the pot. Do this several times. This is to free the nozzle of the particles of coffee and egg which may have lodged there. Place the coffeepot where it will keep warm, but not get so hot that the contents will bubble. After it has stood for five minutes, strain it into a hot coffeepot, and send to the table at once.

LIQUORS TO SERVE WITH CERTAIN SPECIFIED FOODS

Fashion, taste, and the instincts of the stomach, suggest the following:

Raw oysters—Sauterne, white Burgundies, or hock.

Soup—Sherry or Madeira.

Fish—Claret, Sauterne, or hock.

Roast (*relves*)—Burgundy or champagne, Roman or Kirsch punch.

Second course roast (game and poultry)—Old Champagnes, sparkling Moselles, clarets, red Burgundies, etc.

Entrees—Champagne.

Game and salads—Champagne.

Dessert—No liquors, or perhaps some fine Hungarian wine, or burnt brandy with black coffee.

With lunch in which cheese and rye or other bread, or cereal or starchy products predominate, the thing most used, and which most aids digestion, is beer, ale, porter, or stout.

Beer is not much drawn from the wood now, except in very small bars and at country crossroads. It is just as good drawn from the cellar through pipes plated inside with tin; but they must be kept scrupulously clean, and every morning three or four glasses of beer should be drawn off and thrown away. Pipes should be cleansed every week with a strong solution of sal soda and hot water.

In opening still wines the top of the capsule should be cut, leaving the shining metal below to form an ornamental band. Wipe off the top with a napkin, and, if you serve it, pour with the right hand, holding the bottle in the center of the bulge, pressing lightly with the thumb and fingers. This is more graceful than grasping it impetuously by the neck. It is a custom, more in America than elsewhere, for gentlemen to pour out their own liquors, especially if in a party.

In opening Champagne and other effervescent drinks, including malt liquors, cut the band below the cork with the nippers, and the wires will come off easily by a twist of the hand. It will be necessary to use the corkscrew in case of malt liquors not confined by the patent rubber cork, and there is great danger of cutting the left hand in case of breakage, if, as is generally the case, the bottle is grasped by the neck. It should be held firmly with the left hand near the bottom of the bulge, and the cork should be drawn steadily with the right, and without shaking the bottle. There is no danger by this method.

CORDIALS

Kirschwasser, a spirit from black cherries, in great demand throughout Europe, is becoming abundant in the United States, and equal to any in Europe. Kirsch is an excellent digestive and tonic for throat, lungs and entire system; used in sorbets, etc. A punch of kirsch, coffee, sugar and ice-water makes a delicious drink in warm weather.

Benedictine, distilled at Fecamp, Normandy, is a very famous old cordial, originally prepared exclusively by the Benedictine monks, but since the French Revolution it has been made by a secular company. It is known principally as a genitial stimulant.

Chartreuse is a tonic cordial, very palatable, and highly esteemed for its stomachic and antifebrile virtues. It is prepared by the distillation of various aromatic plants, especially nettles, growing in the Alps, carnations, absinthium, and the young buds of the pine tree. There are three kinds, green, yellow, and white.

Maraschino originated with the Italians. For years the Pope sent this delicious liquor to all the grandees of the world. Queen Elizabeth of England was extravagantly fond of it, and, as if to honor it, drank it from a goblet of gold. The basis of Maraschino is black cherries, jasmine, roses, orange flowers, etc., fermented, and distilled. It is recommended as an anodyne against nervousness. It is extensively used in the preparation of jellies, sorbets, pastry, etc.

Montana is prepared from the juices of plants, flowers, roots, etc., growing on the highest mountains of America, principally the Rockies and Alleghanies. It is a powerful digestive, suitable for everybody, but principally for the aged and debilitated. It should generally be taken after dinner.

Curacao, dub (sweet) and sec (dry), also triple sec, has for its basis the peel of the young bitter orange growing generally in the island of Curacao, a possession of Holland, off South America. It is a digestive, and is used as a preventive against fever. It is white or green in color.

Anisette is recommended for the cure of flatulency, colic, etc. The aroma and flavor of this delicious, ancient, and popular liquor is obtained from annis seed.

Absinthe (green or white), a bitter beverage used as an appetizer, and bitterly denounced and as warmly praised by different *critiques* the past century. The present method of preparation dates back only sixty years. Formally it was simply an infusion of herbs in white wine. In Normandy and in certain countries around the Alps it is still prepared in that crude way. The distillers of Besancon, Pontarlier, and Couvet hit on the idea of distilling the Absinthe herb (wormwood), adding annis, fennel, and corriander seeds, etc., *ad lib.*, these making an agreeable beverage. Absinthe so made soon had considerable success, which had the usual effect of bringing out the injurious trash made from oils, essences, etc. Absinthe, if properly made, is healthful—a wonderful appetizer and soother of the nerves—if not taken in excess. It is usually taken with half a glass of water to a small wineglass of Absinthe. The water is allowed to drip on the Absinthe so as to milk or pearl it. Taken pure it has the same properties as peppermint in cases of colic or cramps. To some tastes a cocktail is much improved by the addition of two or three drops of Absinthe.

SYRUPS, ESSENCES, TINCTURES, ETC.

These preparations consist of ingredients used in the following recipes for making prepared punches, cocktails, etc.

Plain Syrup.

Take 6½ pounds of loaf-sugar.
½ gallon of water.
The white of 1 egg.

Boil until dissolved, and filter through flannel.

Gum Syrup.

Take 14 pounds of loaf-sugar.
1 gallon of water.

Boil together for five minutes, and add water to make up to 2 gallons.

Lemon Syrup.

Take 5 gallons of gum syrup.
4 ounces of tartaric acid.
1 ounce of oil of lemon.
1 pint of alcohol.

Cut the oil of lemon in the alcohol, add the tartaric acid, and mix thoroughly with the syrup.

Essence of Lemon.

Take 1 ounce of oil of lemon.
1 quart of alcohol (95 per cent).
½ pint of water.
1½ ounces of citric acid.

Grind the citric acid to a powder in a porcelain mortar; dissolve it in the water. Then cut the oil of lemon in the alcohol, and add the acid water.

Tincture of Orange Peel.

Take 1 pound of dried orange peel (ground).
1 gallon of spirits (95 percent).

Place them in a closely corked vessel for ten days; strain and bottle for use.

Tincture of Lemon Peel.

Cut into small chips the peel of twelve large lemons; place it in a glass jar, and pour over it one gallon spirits seventy percent; let it stand until the lemon peel has all sunk to the bottom of the liquor; it is then ready for use withont either filtering or straining.

Tincture of Cloves.

Take one pound of ground cloves; warm them over a fire until quite hot; put them quickly into a jar, pour on them one gallon ninety-five percent alcohol; cover them air-tight, and let them stand for ten days; draw off into bottles and cork close.

Tincture of Cinnamon.

Place two pounds of ground cinnamon into a jar, with one gallon ninety-five percent alcohol, closely covered; at the end of eight days strain the liquor clear; wash the sediment with one quart proof spirits; strain it; mix the two liquors together, and filter through blotting paper.

Cider Cup.

To a quart of cider add half a lemon squeezed, three tablespoonfuls of powdered lump sugar, two wine glasses of pale brandy, a wine-glass of Curacoa, two slices of lemon, with grated nutmeg on the top. Ice well, and serve with borage.

White Special.

(GIN FIZZ.)

Dedicated to the Big 4 R. R.

Made the same as Silver Fizz, but adding about a wine glass of cream. It makes a delicious drink, and is really one of the finest mixed drinks made.

THE KNICKERBOCKER

Olden worthies who took their cups regularly, and so lived clean and cheerful lives, when they were moved to give up their choice recipes for the public good, described them under the head of "kitchen physic"; for the oldest "Curry," or Cookery Books (the words are synonymous) include under this head both dishes of meats and brewages of drinks. One cup is described as "of mighty power in driving away the cobwebby fogs that dull the brain"; another as "a generous and right excellent cordial, very comforting to the stomach"; and their possession of these good qualities was notably the reason of their appearance at entertainments. Among the most prominent ranks the medicated composition called Hypocras, also styled "Ypocras for Lords," for the making of which various recipes are to be found, one of which we will quote:

"Take of Aqua vitæ (Brandy)	5 oz.
Pepper	2 oz.
Ginger	2 oz.
Cloves	2 oz.
Grains of Paradise	2 oz.
Ambergris	5 grs.
Musk	2 grs.

Infuse these for twenty-four hours, then put a pound of sugar to a quart of red wine or cider, and drop three or four drops of the infusion into it, and it will make it taste richly." This compound was usually given at marriage festivals, when it was introduced at the commencement of the banquet, served hot; for it is said to be of so comforting and generous a nature that the stomach would be at once put into good temper to enjoy the meats provided. Hypocras was also a favorite winter beverage, and we find in an old almanac of 1699 the lines—

"Sack, Hypocras, now, and burnt brandy
Are drinks as warm and good as can be."

SALOON-KEEPING

It is rarely that a saloon-keeper succeeds who is indifferent to the quality of the whiskey sold to customers. No article sold in a saloon is subjected to so much criticism as the whiskey. If the quality is good the customer is sure to be pleased, and a continual patronage is bound to follow. A young, unripe whiskey, no matter what make or brand, is always ruinous to the business of a saloon. Failures are nearly always due to grasping for too much profit on the whiskey served over the bar at ten or twelve and one-half cents a drink, and on which three to six hundred percent profit is wanted.

With each succeeding purchase goods are bought cheaper by the thoughtless saloon-keeper, and with each cheapness the grade deteriorates, patronage grows less and less, and it ends with Mr. Saloon-keeper going out of business a failure.

Bourbon whiskey is ripe between the ages of eight and ten years and continues to improve until much older. Rye whiskey ripens between six and eight years: its taste and flavor is most perfect at these ages; further age is of no benefit to rye whiskey.

CUPS AND THEIR CUSTOMS

Let your utensils be clean, and your ingredients of first-rate quality, and, unless you have someone very trustworthy and reliable, take the matter in hand yourself; for nothing is so annoying to the host, or so unpalatable to the guests, as a badly compounded cup. In order that the magnitude of this important business may be fully understood and properly estimated, we will transfer some of the excellent aphoristic remarks of the illustrious Billy Dawson (though we have not the least idea who he was), whose illustrisity consisted in being the only man who could brew punch. This is his testimony: "The man who sees, does, or thinks of anything while he is making Punch, may as well look for the Northwest Passage on Mutton Hill. A man can never make good Punch unless he is satisfied, nay, positive, that no man breathing can make better. I can and do make good Punch, because I do nothing else; and this is my way of doing it. I retire to a solitary corner, with my ingredients ready sorted; they are as follows, and I mix them in the order they are here written: Sugar, twelve tolerable lumps; hot water, one pint; lemons, two, the juice and peel; old Jamaica rum, two gills; brandy, one gill; porter or stout, half a gill; arrack, a slight dash. I allow myself five minutes to make a bowl on the foregoing proportions, carefully stirring the mixture as I furnish the ingredients until it actually foams; and then, Kangaroos! how beautiful it is!!" If, however, for convenience, you place the matter in the hands of your domestic, I would advise you to caution her on the importance of the office, and this could not be better effected than by using the words of the witty Dr. King:

"O Peggy, Peggy, when thou go'st to brew,
Consider well what you're about to do;
Be very wise—very sedately think
That what you're going to make is—drink;
Consider who must drink that drink, and then
What 'tis to have the praise of honest men;
Then future ages shall of Peggy tell,
The nymph who spiced the brewages so well."

Respecting the size of the cup no fixed rule can be laid down, because it must mainly depend upon the number who have to partake of it; and be it remembered that, as cups are not intended to be quaffed *ad libitum*, as did Bicias, of whom Cornelius A—— says—

"To Bicias shee it gave, and sayd,
'Drink of this cup of myne.'
He quickly quafte it, and left not
Of licoure any sygne,"—

let *quality* prevail over *quantity*, and try to hit a happy medium between the cup of Nestor, which was so large that a young man could not carry it, and the country half-pint of our own day, which we have heard of as being so small that a string has to be tied to it to prevent it slipping down with the cider.

In order to appreciate the delicacy of a well-compounded cup, we would venture to suggest this laconic rule, "When you drink—think." Many a good bottle has passed the first round, in the midst of conversation, without its merits being discovered. For Claret Cup see Page 3

RECIPE FOR A HUNTING FLASK

As to the best compound for a hunting-flask it will seldom be found that any two men perfectly agree; yet, as a rule, the man who carries the largest, and is most liberal with it to his friends, will be generally esteemed the best concocter. Some there are who prefer to all others a flask of gin into which a dozen cloves have been inserted, while others, younger in age and more fantastic in taste, swear by equal parts of gin and noyeau, or of sherry and maraschino. For our own part we must admit a strong predilection for a pull at a flask containing a well-made cold punch or a dry curacoa. Then again, if we take the opinion of our huntsman, who (of course) is a *spicy* fellow, and ought to be up in such matters, he recommends a piece of dry ginger always kept in the waistcoat pocket, and does not care a *fig* for anything else. So much for difference of taste; but as we have promised a recipe, the one we venture to insert is specially dedicated to the lovers of usquebaugh, or "the crathur." It was a favorite of no less a man than Robert Burns, and one we believe not generally known; we therefore hope it will find favor with our readers, as a wind-up to our brewings.

RECIPE.

To a quart of whiskey add the rinds of two lemons, an ounce of bruised ginger, and a pound of ripe white currants stripped from their stalks. Put these ingredients into a covered vessel and let them stand for a few days, then strain carefully, and add one pound of powdered loaf sugar. This may be bottled two days after the sugar has been added.

THE MODEL BARTENDER

He should be a man of good character, straight personal habits, good temper, cheerful, obliging, wide-awake, quick, graceful, attentive, sympathetic, yet too smart to be "worked," neither grum nor too talkative, of neat appearance and well dressed. He should study the tastes of the patrons. For instance, in mixing a cocktail most clerks make the mistake of putting in too much bitters, in which case the drink is spoiled, or rather, is unpalatable to the customer. Most men like but very little bitters. You should, in order to become proficient and popular, study all the points in the mixing of all drinks. There can be too much syrup or sugar, lemon juice or other ingredient used, in the same way as too much bitters in a cocktail. This is a profession that every man can not master. There are men who would not make a first-class bar-clerk in a lifetime. A clerk should not encourage "hangers-on," loungers, or men under the influence of drink. In fact, he should never sell or give to a man in his cups, for this feature casts the greatest odium on our business, which could be made as legitimate as any if in the hands of proper persons.

PREPARATION FOR CUSTOMERS

The first thing to be done in the morning upon opening a saloon is to look after ventilation. There is generally a very odious smell about a place that has been tightly closed during the night, and it is as unwholesome as it is disagreeable. It should be gotten rid of as soon as possible. See that you have enough fine ice prepared to serve your morning customers with drinks, and if the man on watch the night before has failed to fill his bottles, you must perform this duty at once, and place them on ice so that your customers may not have to use warm liquors. You must keep filling them up all day to supply the drain on them, and to avoid serving warm liquors. Polish up your glasses between drinks, and always be ready for customers. See to it that the place is neat and tidy; the window-panes, showcases and nickel-plating clear as crystal, and bright as new minted coins; the linen towels white as snow; the lunch fresh and inviting. A progressive clerk, and the proprieter too, for that matter, will visit other places to see what laudable innovations are being made, what new inducements are being offered. Make your own domains correspondingly or surpassingly attractive, and give the boys a right royal welcome.

DONT'S FOR YOUNG BARTENDERS

Don't bring yourself into prominence before a crowd at the bar. Be polite and approachable, but let them advance to you.

Don't join in any conversation, but if it is general you may seem interested.

Don't volunteer any opinions unless your patrons express a desire, or at least a willingness to hear you.

Don't express your sentiments at all if at variance with the majority, unless very important interests are at stake.

Don't be too positive about things. You may be in error.

Don't look fiercely at people, or talk loud and harshly, but cultivate a smiling countenance and quiet, but firm tone of speech.

Don't occupy too much space, but give your colleagues behind the bar a chance.

Don't fail to put things in their places, so that you and your coworkers will know where they are when you want them.

Don't fail to get pay for all drinks.

Don't be in too great a hurry to find out what a party of gentlemen want as they approach the bar.

Don't let them feel that you begrudge the space they occupy while they talk. Sometimes placing glasses of water before them will break the ice on the subject.

Don't use a wet glass if there is a dry one to be had.

Don't forget to serve your effervescent drinks last in waiting on a party.

Don't overcharge, and don't make short change; be exact and honest as a banker.

Don't use profane language, and do not talk your customers to death.

Don't drink your own liquor; it is bad policy and is liable to make you "how come you so?"

Don't fail to mind your own business, and go to bed sober.

* * *

"Touch brim! touch foot! the wine is red,
And leaps to the lips of the free;
Our wassail true is quickly said—
Comrade! I drink to thee!

"Touch foot! touch brim! who cares? who cares?
Brothers in sorrow or glee;
Glory or danger each gallantly shares—
Comrade! I drink to thee!

"Touch brim! touch foot! once again, old friend,
Though the present our last draught be;
We were boys—we are men—we'll be true to the
Brother! I drink to thee!"

DICK'S ENCYCLOPEDIA

OF

PRACTICAL RECEIPTS AND PROCESSES.

1872

(Index on Page 173)

IMITATION LIQUORS

Imitation Liquors. The liquors generally met with for sale and consumption are, it is well known, rarely genuine; and even if genuine, are often adulterated with water and various deleterious compounds. The imitations of liquor innocently imbibed by the unsuspecting as wholesome stimulants, contain, too freqently, combinations that are most hurtful, if not actually poisonous. Receipts are here given for making imitation liquors, which are at least as wholesome as genuine spirits, and contain no ingredient that can hurt the system more than alcohol itself does. They are the receipts furnished by a practical French chemist, who has made this business a specialty for some thirty years.

664. Prune Flavoring for Liquors. Mash 25 pounds prunes, infuse for 15 days with 6 gallons proof spirit, stirring it every day; press and filter.

665. Raisin Flavoring for Liquors. Subject 25 pounds mashed raisins to the same process as the prunes in the last receipt.

666. St. John's Bread Flavoring for Liquors. Cut 50 pounds St. John's bread into small pieces. Infuse for 15 days with 12 gallons proof spirits, stirring every day; filter.

667. Orange Peel Flavoring for Liquors. Steep 1 pound orange peel in 1 gallon 95 per cent. alcohol for 15 days; filter.

668. Vanilla Flavoring for Liquors. Slice 1 drachm vanilla in small pieces; infuse for 20 days in 1 pint 95 per cent. alcohol; filter.

669. Orris Root Flavoring for Liquors. Infuse 2 ounces powdered orris root for 20 days in 1 quart 95 per cent. alcohol, and filter.

670. Sassafras Flavoring for Liquors. Granulate ¼ pound sassafras bark, and infuse it in ¼ gallon 95 per cent. alcohol for 20 days; filter.

671. Hickory Nut Flavoring for Liquors. Crush 1 bushel hickory nuts, and infuse for 1 month in 12 gallons 95 per cent. alcohol; strain and filter.

672. Flavoring Compound for Brandy. Mash 25 pounds raisins, 12 pounds prunes, 6 pounds figs, and 1 pineapple sliced; infuse for 15 days in 20 gallons proof spirits, stirring every day, and then filter.

673. Coffee Flavoring for Liquors. Infuse 1 pound ground roasted coffee in 1 gallon 95 per cent. alcohol. This is used in combination with other flavors for brandy.

674. Peach Flavoring for Whiskey. Steep for 1 month, 10 gallons dried peaches, 10 gallons oak saw-dust, and 5 pounds black tea in 40 gallons proof spirits; strain and filter.

675. How to Prepare Essence of Cognac. Take 1 ounce oil cognac—the green oil is the best; put it in ½ gallon 95 per cent. spirits. Cork it up tight, shake it frequently for about 3 days; then add 2 ounces strong ammonia. Let it stand 3 days longer; then place in a stone jar that will contain about 3 gallons, 1 pound fine black tea, 2 pounds prunes, having first mashed the prunes and broken the kernels. Pour on them 1 gallon spirits 20 above proof. Cover it close, and let it stand 8 days. Filter the liquor, and mix with that containing the oil and ammonia. Bottle it for use. This makes the best flavoring known for manufacturing brandies, or for adding to such cordials, syrups, &c., as require a fine brandy flavor. (*Monzert.*)

676. To Imitate Brandy with Essence of Cognac. Take 1 pint essence of cognac (*see No.* 675), 15 gallons pure spirits (very fine) 20 per cent. above proof, ½ pint plain white syrup. Color with caramel.

677. Simple Test for Alcohol in Oil of Cognac. Take a half ounce phial or test tube, and fill it *exactly* half full of oil of cognac; then fill up the remaining space with water, and shake it well. The alcohol, if there be any present, having a much greater affinity for water than for the oil, will leave the oil and combine with the water; denoting, by the decrease in the bulk of the oil, or the increase in that of the water, the quantity of alcohol present. Other tests for essential oils will be found under its heading. (*See Index.*)

678. Highly Flavored Domestic Brandy. To 40 gallons French proof spirits, add 2 quarts raisin flavoring (*see No.* 665), 2 quarts prune flavoring (*see No.* 664), 2 quarts St. John's bread flavoring (*see No.* 666), 1 gallon best sherry wine, 2 drachms oil of cognac and 20 drops oil of bitter almonds, both dissolved in a little 95 per cent. alcohol; 1 gallon Jamaica rum (or ½ ounce Jamaica rum essence), and 2 pints wine vinegar. Ten gallons of this mixture, mixed with 30 gallons French spirits, make an excellent domestic brandy, and 1 pound of glycerine gives it age.

679. Imitation Cognac Brandy. To 36 gallons French proof spirits, add 4 gallons Pellevoisin or Marette cognac, ½ gallon best sherry or Madeira wine, and 20 drops oil of cognac, dissolved in a little 95 per cent. alcohol. Then pour 2 quarts boiling water over 2 ounces black tea; when cold, filter through flannel, and add a little maraschino; mix this with the other ingredients, and color the whole to suit, with caramel. (*See No.* 694.)

Another excellent formula is as follows: Dissolve 20 drops oil of cognac and 15 drops oil of bitter almonds in a little 95 per cent. alcohol; add it to 40 gallons 60 per cent. French spirit, with 2 pints tincture of raisin, 2 pints tincture of prunes, 3 pints best Jamaica rum, 3 pints best sherry wine, and ½ ounce acetic ether. Color with caramel.

680. Imitation Brandy. Take 40 gallons French spirit; add to it 1 pint tincture of raisins (*see No.* 665), 1 quart prune flavoring (*see No.* 664), ½ gallon best sherry or Madeira wine, and 1 pint wine vinegar. Then add 1 drachm oil of cognac, 12 drops oil of bitter almonds, ¼ to ½ drachm tannin powder, each dissolved separately in 95 per cent. alcohol. Color to suit with caramel. (*See No.* 694.)

681. Imitation French Brandy. To 40 gallons French proof spirit, add 1 quart tincture of orris root (*see No.* 669), 1 pint vanilla flavoring (*see No.* 668), ½ gallon best sherry or Madeira wine, and 1 pint wine vinegar. Dissolve separately, 1 drachm oil of cognac and 12 drops oil of bitter almonds, each in a little 95 per cent. alcohol, and add them to the mixture, coloring the whole to suit with caramel. (*See No.* 694.)

682. Imitation Pale Brandy. Infuse 1 drachm star-anise (breaking the star only) for 8 hours in ½ pint 95 per cent. alcohol, and filter; add this to 40 gallons proof spirits; then add ½ gallon best Jamaica rum, and 1 pint of the best raspberry syrup. Dissolve 1 drachm oil of cognac, and 12 drops oil of bitter almonds, separately, in a little 95 per cent. alcohol, and mix them with the whole.

683. Imitation Bourbon Whiskey. Mix together 40 gallons proof spirits, ½ gallon peach flavoring (*see No.* 674), ¼ gallon hickory nut flavoring (*see No.* 671), ¼ gallon highly flavored brandy (*see No,* 678), 1 pint wine vinegar, and 1 pint white glycerine. Add to these 12 drops oil of cognac dissolved in 95 per cent. alcohol, and color with caramel. (*See No.* 694.)

Or: 36 gallons proof spirits, 4 gallons highly flavored proof rye whiskey, 1 gallon domestic brandy (*see No.* 680), together with the same proportions of vinegar, glycerine, and oil of cognac, as before.

684. Imitation Bourbon Whiskey. To 36 gallons proof spirits, add 4 gallons highly flavored proof Bourbon, 1 gallon New England rum, ½ gallon sweet Catawba wine (or 1 quart sherry wine), and 1 pound white glycerine. Color to suit with caramel. (*See No.* 694.)

685. Imitation Bourbon Whiskey. 36 gallons proof spirit, 4 gallons highly flavored proof Bourbon, 1 gallon malt whiskey, 1 pint wine vinegar, 1 pint syrup, and 12 drops oil of cognac dissolved in 95 per cent. alcohol. Color with caramel. (*See No.* 694.)

686. Imitation Bourbon Whiskey. To 40 gallons proof spirit, add 1 gallon hickory flavor (*see No.* 671), 1 gallon domestic brandy (*see No.* 680), 1 pint wine vinegar, and 1 pound white glycerine, with 12 drops oil of cognac dissolved in 95 per cent. alcohol, and caramel (*see No.* 694) sufficient to color.

687. Imitation Copper-Distilled Bourbon Whiskey. Dissolve 1 drachm sulphate of copper in ½ pint water, filter, and add it to 40 gallons proof spirit, with 1 gallon peach flavor (*see No.* 674), 1 gallon brandy flavor (*see No.* 672), 1 pint wine vinegar, 1 pound white glycerine, and 12 drops oil of cognac dissolved in 95 per cent. alcohol. Color with caramel. (*See No.* 694.)

688. Imitation Rye Whiskey. To 40 gallons proof spirit, add 2 gallons peach flavoring (*See No.* 674), 1 pint white vinegar, and 12 drops oil of cognac in 95 per cent. alcohol. Color with caramel. (*See No.* 694.)

689. Imitation Sweet Rye Whiskey. 30 gallons proof spirit, 10 gallons proof rye whiskey, and 1 gallon raisin flavor (*see No.* 665), colored with sufficient caramel. (*See No.* 694).

690. Imitation Irish Whiskey. 36 gallons French spirits 20 above proof, 4 gallons Scotch (Ramsay) whiskey, 3 pints best sherry wine, 2 pints syrup, and 10 drops sassafras flavor. (*See No.* 670.)

691. Imitation Scotch Whiskey. 36 gallons French spirits 20 above proof, 4 gallons Scotch whiskey, and 1 quart syrup.

692. To Impart a Smoky flavor to Whiskey. The simplest way to impart this peculiar flavor to whiskey is by preparing the barrel. Insert securely a large sheet-iron funnel into the bung-hole of a dry 40-gallon barrel; provide a small open furnace, containing a charcoal fire; put 1 pound of birch bark on the fire, and support the barrel, with its funnel downwards, over the furnace, so that the funnel, which should be considerably wider than the furnace, will receive the smoke from the bark. When the bark ceases smoking, remove the funnel and bung the barrel up tight. After it has stood 24 hours, put the spirit in the barrel, and keep it there for 36 hours, frequently rolling the barrel, in order that the spirits may be thoroughly impregnated with the smoke and smoky deposit on the inside of the barrel. The spirits will then be found to have acquired the desired flavor. Creosote, diluted with alcohol, is sometimes used to impart the smoky flavor to spirits.

693. To Give the Appearance of Age to Brandy Barrels. Dissolve in 3 gallons water, 3 pounds sulphuric acid and 1 pound sulphate of iron. Wash the barrels with it on the outside.

694. To Make Caramel. Dissolve 7 pounds crushed sugar in 1 pint water; boil it in a 5-gallon copper kettle, stirring occasionally until it gets brown; then reduce the fire and let the sugar burn until the smoke makes the eyes water. When a few drops, let fall into a tumbler of cold water, sink to the bottom and harden sufficiently to crack, it is done. Then pour on it, by degrees, about 2 quarts warm water, stirring all the time. When well mixed, filter it hot through a coarse flannel filter. Some use lime-water to dissolve the burnt sugar. Care must be taken not to overburn it, as a greater quantity is thereby rendered insoluble. The heat should not exceed 430°, nor be under 400° Fahr. The process for nice experiments is best conducted in a bath of melted tin, to which a little bismuth has been added, to reduce its melting point to about 435°; a little powdered resin or charcoal, or a little oil, being put upon the surface of the metal, to prevent oxidation.

695. To Plaster Brandy Pipes. First notch over the bottom of the casks with a hatchet or adze; then, for the bottom of a ⅛ pipe mix ½ gallon plaster with 1 gallon water, and pour it on; while the plaster is setting, tap the cask gently with a mallet, in order that the plaster may penetrate into every crevice. When the plaster is fully set, wash it over with a wet sponge. If you wish to color the plaster, add a little Venice red.

696. Wax Putty for Leaky Casks, Bungs, &c. Melt 8 pounds yellow wax and 12 pounds solid turpentine over a slow fire; add 4 pounds tallow; and, when thoroughly mixed, remove the whole to a distance from the fire and stir in 2 pounds spirits of turpentine, and let it cool.

697. Imitation Schiedam Gin. Dissolve 3½ drachms oil of juniper in sufficient 95 per cent. alcohol to make a clear liquid; add it to 40 gallons French spirits 10 above proof, with 8 ounces orange peel flavoring (*see No.* 667), 1 quart syrup, and 30 drops oil of sweet fennel.

698. Imitation Old Tom London Gin. Dissolve in 1 quart 95 per cent. alcohol, 1 drachm oil of coriander, 1 drachm oil of cedar, ½ drachm oil of bitter almonds, ½ drachm oil of angelica, and ½ drachm oil of sweet fennel; add it to 40 gallons French spirit 10 above proof, with 1 pint orange-flower water, 1 quart syrup, and 1 drachm oil of juniper dissolved in sufficient 95 per cent. alcohol to be clear.

699. Imitation Santa Cruz Rum. 35 gallons New England rum, 5 gallons Santa Cruz rum, and 1 drachm vanilla flavoring. (*See No.* 668.)

700. Imitation Batavia Arrack. 35 gallons French spirit (rice spirit is preferable), 5 gallons Batavia arrack, ¼ ounce balsam of tolu, and ½ ounce tincture of flowers of benzoin.

701. Imitation Batavia Arrack. To 12 gallons pale rum add 2 ounces flowers of benzoin, 1½ ounces balsam of tolu, 1 sliced pineapple. Digest with occasional agitation for a month; then add ½ pint raw milk. Agitate well for 15 minutes, and rack in a week. A fine imitation.

702. Imitation Jamaica Rum. 20 gallons spirit 10 above proof, 20 gallons New England rum 10 above proof, ½ pound Jamaica rum essence, 1 gallon St. John's bread flavoring (*see No.* 666), and 1 pound white glycerine. Color to suit with caramel. (*See No.* 694.) Or:—40 gallons spirit 10 above proof, 1 pound Jamaica rum essence, 10 drops oil of cloves, 1 gallon St. John's bread flavoring (*see No.* 666), and 1 pound white glycerine. If desired, there may be added 1 ounce gum kino and ½ drachm oil of caraway, each dissolved in 2 ounces 95 per cent. alcohol.

703. To Make Spirit Finings. Pulverize 1 pound ordinary crystals of alum, divide into 12 equal portions, and put up in blue papers marked No 1. Next take 6 ounces carbonate (the ordinary sesquicarbonate) of soda, divide it into 12 parts and put them up in white papers marked No. 2. In place of the 6 ounces carbonate of soda, 4 ounces dry salt of tartar may be substituted, but the white papers containing this latter substance must be kept in a dry, well corked bottle or jar.

704. To Clarify Gin or Cordials. To clarify from 30 to 36 gallons gin, dissolve the contents of one of the blue papers, as prepared in No 703, in about a pint of hot water, and stir it into the liquor thoroughly. Then dissolve the contents of one of the white papers in about ½ pint hot water, and stir well into the liquor; bung the cask close, and let whole remain till the next day.

705. To Blanch Gin or other Wh Liquor. By using double the quantity finings, that is, 2 of each of the powders, laid down in the foregoing receipt, the liqu will be blanched as well as clarified. It well to recollect, however, that the more ings are employed, the greater the risk of juring the liquor, which may have a tenden to become flat when "on draught."

706. Finings for Gin. To 100 gallo gin, take 4 ounces roche alum, and put it in 1 pint of pure water; boil it until it is di solved, then gradually add 4 ounces salts tartar; when nearly cold put it into the gi and stir it well with a staff for 10 minute The liquor must not be covered until it i fine; when this is accomplished, cover it tight to prevent it from losing its strength.

707. To Remove the Blackness fro Gin. Some gin has a particular blackness to remove which, take 1 ounce pulverize chalk and 2 or 3 ounces isinglass, dissolved put this into the gin and it will become transparent. The above is enough for 50 gallons The blackness which gin sometimes contracts by coming in contact with iron, may also b carried down by putting a solution of 2 ounce isinglass and 1 quart skimmed milk into th spirit. When the color is very black, whic will happen by merely an iron nail havin fallen into the liquor, there is no remedy bu to have the liquor distilled over again.

708. To Clarify Stained Gin. Whe gin has once become much stained, the only remedy is to re-distill it; when it is only slightly stained the addition of a few pounds acetic acid to a pipe or butt, 1 or 2 spoonfuls to a gallon, or a few drops to a decanterful, will usually decolor it.

709. Brandy Filter. When necessary to filter an imitation brandy, an excellent utensil may be used for that purpose which has already been described. (*See No.* 17, *fig.* 5.) It will, however, be necessary to substitute cotton wadding in place of the charcoal.

710. To Make Rum Punch. Dissolve in 1 pint 95 per cent. alcohol, 3 drachms oil of lemon, and ½ drachm oil of cloves; infuse 3 ounces ground allspice for 10 days in 1 quart 95 per cent. alcohol, and filter it. Mix these with 18 gallons spirit 30 above proof, 2 gallons Jamaica rum, and 1 pound Jamaica rum essence (or 20 gallons New England rum 30 over proof and ½ pound Jamaica rum essence). Next add 2½ pounds tartaric acid dissolved in 2½ gallons water, and 18 gallons syrup made of 108 pounds white sugar. Color with caramel. (*See No.* 694.)

711. To Make Wine Punch. Dissolve 2½ drachms oil of lemons and ½ drachm oil of cloves in 95 per cent. alcohol; make a infusion of 3 ounces ground allspice, as in las receipt; add these to 10 gallons proof spirit, 10 gallons Marsala or Catalonia wine, 10 gal lons syrup made of 35 pounds white sug and ½ pound tartaric acid. If not red enoug add a little cherry juice. Filter.

712. To Make Wine Punch. To 1 gallons proof spirit, add 10 gallons Marsal or Catalonia wine. Take 10 gallons syr made of 35 pounds sugar; peel the rind, thinl of 120 lemons; bring the syrup to a boil, a simmer the lemon rinds in it for ½ hour more, then strain it through a fine flann Mix all the above with the juice of the lemo Instead of boiling the lemon peel in the syr it may be infused for 5 or 6 days in 95 cent. alcohol. The color can be deepen with cherry juice. Brandy, rum, whiskey a arrack punch may be made as above, sub tuting the liquor for the wine and spirits.

CHAMPAGNE

Champagne. The process of making American and imitation French champagne is one requiring great care, especially in producing a not only clear, but bright wine. Full directions are given below for making the necessary syrup, mixing the ingredients, fining, filtering and gassing; including a number of receipts for different kinds of champagne. A careful attention to the instructions laid down will produce wines which will compare favorably with the best genuine importations.

714. To Make a Filter for Filtering Wines. A filter for wines is usually made of felt, shaped like a cone or sugar loaf; those without any seam are the best. A lining of paper pulp is prepared in the following manner: Tear from 2 to 4 sheets filtering paper into small pieces and put it into a pail; pour over it a little boiling water, sufficient, by thorough beating, to form a fine smooth paste; then add sufficient water to fill the filter. Pour this quickly into the filter, and, 5 minutes after the water has drained through, fill up with the wine to be filtered, taking care to keep the filter always full.

715. To Make Syrup for Champagne Wine. To 25 pounds white sugar, add 2 gallons water and the whites of 4 eggs; stir until the sugar is dissolved. Let the whole simmer to the candy degree; then strain it through a bag made of fine flannel.

716. To Prepare Isinglass for Fining Wines. Cut up some isinglass (it must be of the very best quality), and put it in a jar, with just enough wine or water to cover it; add daily as much of the wine or water as has been absorbed by the isinglass. In 6 or 8 days it should be completely dissolved, forming a thick fluid mass. Squeeze it through a linen cloth and put it into a bottle, adding 4 or 5 per cent. of 95 per cent. alcohol to make it keep. For 40 gallons wine to be fined, take 1 wine-glassful of dissolved isinglass, add a little wine and a pinch of salt, and beat to a froth with a whisk, adding by degrees sufficient wine to make the mixture up to ½ gallon. When foaming, pour it slowly into the wine, stirring till all the fining is incorporated with the wine. Isinglass thus prepared and used will precipitate completely; and, after a few days, the wine will be bright. Too much care cannot be taken in the preparation of fining, as even the finest isinglass contains fibrous matter which dissolves with difficulty; this is very apt to remain suspended in the wine, and is not visible until developed, after bottling, by the gas with which the wine is afterwards charged.

717. To Prepare Champagne Wine for Charging. Put the wine used to make the champagne into a cask, add the brandy spirit, the aroma or flavoring, and the syrup, and stir for 10 minutes. Every day for 4 days draw off 15 or 20 gallons of the mixture and pour it in again; let it rest 4 days more, then add the fining, stir for 10 minutes, and bung up the cask. In 3 or 4 days, if bright, draw off slowly, so as not to disturb the lees. Filter (*see No.* 714), and it is ready for the fountain of the gassing apparatus.

718. To Charge Champagne with Gas. Matthews' apparatus is the one usually adopted in the United States for generating the gas and charging champagne wine. The fountains, tubes, and valves are silver-lined, and the machines are adapted for pint and quart bottles. The following is a proper charge for a No. 2 apparatus with 2 fountains: Charge the generator with 9 gallons water, 6 gallons ground marble, and 3 gallons sulphuric acid; put 2 gallons water in the gas washer, and 20 gallons wine in each of the fountains. For a warm climate, a pressure of 70 pounds to the square inch is sufficient. When the wine is made in winter for immediate sale, the pressure may be increased to 80 pounds. Genuine champagne has an average pressure of 50 pounds.

719. Catawba Champagne. Take 40 gallons Catawba wine; ½ gallon old cognac brandy; and 4 gallons syrup made of 30 pounds sugar and 2 gallons water according to No. 715;—or, 38 gallons Catawba wine; 2 gallons Angelica wine, and 4 gallons syrup as above. A very little tincture vanilla added to either of these makes a fine bouquet.

720. California Champagne. 40 gallons California wine; 1 quart raspberry syrup (*see No.* 1372); 4 gallons syrup made of 25 pounds sugar and 2 gallons water (*see No.* 715); and 4 gallons water. Or: 20 gallons California wine; 20 gallons Sauterne or white Bordeaux wine; ½ gallon old cognac brandy; with 4 gallons syrup as before. Add to these 10 per cent. of water.

721. Scuppernong Champagne. 40 gallons Scuppernong wine; ½ gallon old cognac brandy; and 3 gallons syrup made of 20 pounds sugar (*see No.* 715) and 2 gallons water.

722. Imitation French Champagne. 40 gallons white Bordeaux wine; 1 gallon muscat wine; ½ gallon old cognac brandy; and 4 gallons syrup made of 25 pounds sugar and 2 gallons water. (*See No.* 715). In this receipt a little tincture of vanilla, or a small bottle of bouquet venatique, may be used instead of the muscat wine. They may be omitted altogether if aroma is not desired.

723. Cheap Champagne. 13 gallons California wine; 13 gallons white Bordeaux wine; 13 gallons water; 1 gallon 95 per cent. French spirit; 1 quart raspberry syrup (*see No.* 1372); and 4 gallons syrup made of 25 pounds sugar and 2 gallons water. (*See No.* 715.) Or: 20 gallons Catawba wine; 20 gallons water; 2 gallons Angelica wine; 2 gallons 95 per cent. French spirit, and 4 gallons syrup as before.

724. Cheap Champagne. 20 gallons white Bordeaux wine; 20 gallons German or Hungarian wine; 20 gallons water; 2 gallons 95 per cent. French spirit; and 6 gallons syrup made of 35 pounds sugar and 3 gallons water. (*See No.* 715.)

725. The Use of Glycerine in Wine. Glycerine differs from sugar in not fermenting or taking any active part in the process of fermentation. It can, therefore, be made use of after fermentation, to impart any required degree of sweetness to wine, without the risk of further fermentation, as is the case with sugar when used for this purpose; it is said that it can be added with perfect safety to even a young or new wine, as soon as it has become clear. It is absolutely necessary that the glycerine should be chemically pure; care is consequently to be taken in purchasing it, as there are few articles in the market which are liable to contain so many impurities. (*See No.* 1151.) The proportion of glycerine should be from 1 to 3 gallons for 100 gallons of wine, according to the quality of the latter. If the wine is perfectly clear before adding the glycerine it will be ready for bottling at once. It is best to mix the glycerine first with an equal quantity of the wine, and then add the mixture to the remainder of the wine.

726. Electricity as an Agent for improving Whiskey and Wines. From experiments made on a large scale, it has been found that electricity in any form, either as a regular current or a succession of discharges, renders wine or whiskey mellow and mature. It is supposed that the bitartrate of potassa is decomposed, setting free potash and tartaric acid: the former tending to neutralize the acids of the wine; and the tartaric acid, reacting upon the fatty matters present, favors the formation of the ethers which constitute the bouquet of the wine. It is probable, also, that a small quantity of the water is decomposed, setting free oxygen, which forms, with some of the constituents of the wine, new compounds peculiar to old wines.

HOME-MADE WINES

Home-Made Wines. The various processes in domestic wine-making resemble those employed for foreign wine, and depend upon the same principles. The fruit should be preferably gathered in fine weather, and not till it has arrived at a proper state of maturity, as evinced by its flavor when tasted; for if it be employed while unripe, the wine will be harsh, disagreeable, and unwholesome, and a larger quantity of sugar and spirit will be required to render it palatable. The common practice of employing unripe gooseberries for the manufacture of wine arises from a total ignorance of the scientific principles of wine-making. On the other hand, if fruit be employed too ripe, the wine is apt to be inferior, and deficient in the flavor of the fruit. The fruit being gathered, it next undergoes the operation of picking, for the purpose of removing the stalks and unripe or damaged portion. It is next placed in a tub, and well bruised. Raisins are commonly permitted to soak about 24 hours previously to bruising them, or they may be advantageously bruised or minced in the dry state. The bruised fruit is then put into a vat or vessel with a guard or strainer placed over the tap-hole, to keep back the husks and seeds of the fruit when the must or juice is drawn off. The water is now added, and the whole macerated for 30 or 40 hours, more or less; during which time it is frequently stirred up with a suitable wooden stirrer. The liquid portion is next drawn off, and the residuary pulp is placed in hair bags and undergoes the operation of pressing, to expel the fluid it contains. The sugar, tartar, &c. (in very fine powder, or in solution), are now added to the mixed liquor, and the whole is well stirred. The temperature being suitable (generally from 75° to 85° Fahr.), the vinous fermentation soon commences, when the liquor is frequently skimmed (if necessary) and well stirred up, and, after 3 or 4 days of this treatment, it is run into casks, which should be quite filled, and left open at the bung-hole. In about a week the flavoring ingredients, in the state of coarse powder, are commonly added, and well stirred in, and in about another week, depending upon the state of the fermentation and the attenuation of the must, the brandy or spirit is added, and the cask filled up, and bunged down close. In 4 or 5 weeks more the cask is again filled up, and, after some weeks—the longer the better—it is "pegged" or "spiled," to ascertain if it be fine or transparent; if so, it undergoes the operation of racking; but if, on the contrary, it still continues muddy, it must previously pass through the process of fining. Its future treatment is similar to that of foreign wine. The must of many of the strong-flavored fruits, as black currants, for instance, is improved by being boiled before being made into wine; but the flavor and bouquet of the more delicate fruits are diminished, if not destroyed, by boiling.

728. General Receipt for the Preparation of Home-Made Wine from Ripe Saccharine Fruits. I. Ripe fruit, 4 pounds; clear soft water, 1 gallon; sugar, 3 pounds; cream of tartar, dissolved in boiling water, 1½ ounces; brandy, 2 to 3 per cent. Flavoring as required. Makes a good family wine. II. As the last, using 1 pound more each of fruit and sugar. A superior wine.

III. As the first, adding 2 pounds each fruit and sugar. Very strong. Is good without brandy, but better with it. 1¼ pounds of raisins may be substituted for each pound of sugar above. In the above way may be made the following wines:—gooseberry wine, currant wine (red, white or black); mixed fruit wine (currants and gooseberries; or black, red, and white currants, ripe black-heart cherries, and raspberries, equal parts). This is a good family wine. Cherry wine; Colepress's wine, (from apples and mulberries, equal parts); elder wine; strawberry wine; raspberry wine; mulberry wine (when flavored makes port); whortleberry (sometimes called huckleberry) wine; makes a good factitious port; blackberry wine; morella wine; apricot wine; apple wine· grape wine, &c.

729. General Receipt for Making Wine from Dry Saccharine Fruit. I. Dry fruit, 4½ pounds; soft water, 1 gallon; cream of tartar (dissolved), 1 pound; brandy, 1½ to 2 per cent., weak.

II. As the last, but using 5½ pounds dried fruit. A superior family wine.

III. As the last, 7½ pounds fruit, and brandy 3 per cent. A strong wine. Should the dried fruit employed be at all deficient in saccharine matter, 1 to 3 pounds may be omitted, and half that quantity of sugar, or two thirds of raisins, added. In the above manner may be made raisin wine, fig wine, &c.

730. Imitation Champagne. Stoned raisins, 7 pounds; loaf sugar, 21 pounds; water, 9 gallons; crystallized tartaric acid, 1 ounce; honey, ¼ pound; ferment with sweet yeast 1 pound or less; skim frequently, and when the fermentation is nearly over, add coarse-powdered orris root, 1 drachm, and eau de fleurs d'orange, 3 ounces; lemon juice, ½ pint. Rack it, bung close, and in 3 months fine it down with isinglass, ½ ounce; in 1 month more, if not sparkling, again fine it down, and in 2 weeks bottle it, observing to put a piece of double-refined sugar, the size of a pea, into each bottle. The bottles should be wired, and the corks covered with tin foil.

731. To Make Blackberry Wine. To make 10 gallons of this cheap and excellent wine, press the juice out of sufficient fresh ripe blackberries to make 4½ gallons; wash the pomace in 4½ gallons soft spring water, and thoroughly dissolve in it 6 pounds white sugar to each gallon of water (brown sugar will do for an inferior wine); strain the juice into this syrup, and mix them. Fill a cask with it perfectly full, and lay a cloth loosely over the bung-hole, placing the cask where it will be perfectly undisturbed. In two or three days fermentation will commence, and the impurities run over at the bung. Look at it every day, and if it does not run over, with some of the mixture which you have reserved in another vessel fill it up to the bung. In about three weeks, fermentation will have ceased, and the wine be still; fill it again, drive in the bung tight, nail a tin over it, and let it remain undisturbed until the following March. Then draw it off, without shaking the cask, put it into bottles, cork tightly and seal over. Some persons add spirit to the wine, but instead of doing good, it is only an injury. The more carefully the juice is strained, the better the quality of the sugar, and the more scrupulously clean the utensils and casks, the purer and better will be the wine.

732. Cider Wine. Let the new cider from sour apples (ripe, sound fruit preferred), ferment from 1 to 3 weeks, as the weather is warm or cool. When it has attained to a lively fermentation, add to each gallon, according to its acidity, from ½ to 2 pounds white crushed sugar, and let the whole ferment until it possesses precisely the taste which it is desired should be permanent. In this condition pour out a quart of the cider and add for each gallon ¼ ounce of sulphite (not sulphate) of lime. Stir the powder and cider until intimately mixed, and return the emulsion to the fermenting liquid. Agitate briskly and thoroughly for a few moments, and then let the cider settle. Fermentation will cease at once. When, after a few days, the cider has become clear, draw off carefully, to avoid the sediment, and bottle. If loosely corked for a short time, it will become a sparkling cider wine, and may be kept indefinitely long.

733. Honey or Mead Wine. Honey, 20 pounds; cider, 12 gallons; ferment, then add rum, ½ gallon; brandy, ½ gallon; red or white tartar (dissolved), 6 ounces; bitter almonds and cloves, of each ¼ ounce. The process of fermenting, clearing and bottling, is similar to the last receipt.

734. Specimen Process to Make Unripe Grape, Currant, Gooseberry and Rhubarb Wine, according to the process of Dr. McCulloch. Gather the fruit when it is nearly full grown, but before it shows the least sign of ripening. Any kind will do, but it is advisable to avoid choosing those which, when ripe, would be highly flavored. All unsound and bruised fruit should be rejected, and the stalks and remains of blossom removed by picking or rubbing. The following receipt is one of the best on the subject: 40 pounds fruit are to be bruised in small quantities, in a tub which will hold 15 or 20 gallons, sufficient pressure only being used to burst the berries, without breaking the seeds or much compressing the skins. 4 gallons water are then to be poured on the fruit, which is to be carefully stirred, and squeezed with the hands until the whole of the juice and pulp are separated from the solid matter. It is then to rest for a few hours, when it must be pressed and strained through a coarse canvas bag with considerable force. 1 gallon water may afterwards be passed through the residue, to remove any soluble matter that may be left, and then added to the juice. 30 pounds loaf sugar are now to be dissolved in the juice, and the total quantity of liquid made up with water to 10½ gallons. The liquor is now to be put into a tub, over which spread a blanket, covered by a board, and place in a temperature of from 55° to 60° Fahr. for from 24 to 48 hours, according to the signs which it may show of fermentation, when it is to be put into a cask to ferment. The cask must be of such size that the liquor will nearly reach to the bung-hole, so that the scum may run out as it rises. As the fermentation goes on the liquor will decrease, and the cask must be kept filled up nearly to the bung-hole with a portion of the "must" which has been reserved for that purpose. When the fermentation has become a little weaker, which may be known by the hissing noise decreasing, the bung is to be driven in, and a wooden peg, called a spile, made of tough wood, put into a hole bored in the top of the barrel. After a few days this peg is to be loosened to let out any carbonic acid gas which has been generated. This must be done from time to time, and when there is no further sign of gas generating to the danger of the barrel, the spile may be made tight. The wine should be kept during the winter in a cool cellar, and, if fine, may be bottled on a clear cold day at the end of February or the beginning of March, without further trouble. But to ensure its fineness it is preferable to draw it off at the end of December into a fresh cask, so as to clear it from the lees. At this time, also, if it is found to be too sweet for the maker's taste, he should stir up the lees so as to renew the fermentation, at the same time raising the temperature. When it is transferred to the fresh cask, it should be fined with isinglass. Sometimes it is desirable to rack it off a second time into a fresh cask, again fining it. All these removals should be made in clear, dry, and if possible, cold weather. It must be bottled in March. This wine will usually be brisk, but circumstances will occasionally cause it to be sweet and still, and sometimes dry. If sweet, it may be re-made the following season, by adding to it juice from fresh fruit, according to the degree of sweetness, and fermenting and treating it as before. But if it be dry, briskness can never be restored, and it must be treated as a dry wine, by drawing it off into a cask previously fumigated with sulphur (see *No.* 766), and fining and bottling it in the usual manner. Such dry wines sometimes taste disagreeably in the first and second year, but improve much with age. If the whole marc or husks, etc., is allowed to remain in the juice during the first fermentation, the process will be more rapid, and the wine stronger and less sweet; but it will have more flavor. If the wine is desired to be very sweet as well as brisk, 40 pounds of sugar may be used; less sweet and less strong, 25 pounds; it will be brisk, but not so strong, and ought to be used within a year.

735. Ripe Gooseberry Wine. Put the ripe and well picked red gooseberries into a tub or pan, bruise the fruit well, and leave it uncovered for 24 hours. Squeeze the juice from the pulp through a hair or canvas bag. Put the residue of each squeezing into a vessel; pour upon it ½ gallon of boiling water for each gallon of fruit used, and stir well for a quarter of an hour. Let it stand for 12 hours, squeeze the pulp through the bag, and add the liquor to the juice of the fruit obtained. Add 2½ pounds sugar to each gallon of the liquor, and stir it well. Let it stand to ferment. When it has done fermenting, draw it off and add ¾ pint brandy to each gallon. Let it stand to settle for 4 or 5 weeks, then draw it off carefully into a cask that will just hold it; keep it in a cool cellar for twelve months or more, when it may be bottled. Choose a clear, dry, cold day. It ought to be a splendid wine in 2 years.

736. Ginger Wine. Boil 20 pounds sugar in 7 gallons water for half an hour, skimming it well; then put 9 ounces bruised ginger in a portion of the liquor, and mix all together. When nearly cold, put 9 pounds raisins, chopped very small, into a nine-gallon cask, add 4 lemons sliced, after taking out the seeds, and pour the liquor over all, with ½ pint yeast. Leave the cask open for 3 weeks, keeping it filled up with some of the reserved liquor, and bottle it in from 6 to 9 months.

737. Ginger Wine. Another Process. Boil 26 pounds raw sugar in 7 gallons water for half an hour, skimming it well; then, if the syrup is quite clear from scum, pour it boiling upon 8 ounces bruised ginger and 16 lemons sliced; when the whole has cooled down to about 75°, squeeze out the lemons and ginger through a sieve, and add the yeast. Let it work for about 3 days, and then draw it off into a cask. Put half of the lemon and ginger residue in with it. Some first pare the lemons, and having rubbed the rinds with loaf sugar, add the latter when it is done working. Bottle in 3 months.

738. To Make Aromatic Ginger Wine. Reduce the following to coarse powder: 5 pounds Jamaica ginger root, 6 to 8 ounces cloves, 1 pound allspice, ¼ pound cinnamon, and ½ pound mace. Infuse these for 10 days in 10 gallons 95 per cent. spirit, stirring every day, and then filter. Then dissolve 60 pounds white sugar in 85 gallons water; mix the whole together, and color with cherry juice; then filter.

739. To Make Ten Gallons of Ginger Wine. Boil ¼ pound best white Jamaica ginger, bruised, in about 8 gallons water; add the whites of 6 eggs to ¼ ounce isinglass, 15 pounds loaf sugar, and the rinds of 6 lemons; boil the compound ¾ of an hour, and skim it clean; when nearly cold put it into a vessel that will admit of its being drawn off; set it to work with yeast, and in a few days afterwards draw it off into a cask; then add the juice of the 6 lemons, and 2 quarts spirits; in a week or ten days bung the cask closely, and when thoroughly fine, bottle the wine off. It will be fit to drink in 4 months.

740. Simple Receipt for Making Grape Wine. Put 20 pounds of ripe, fresh-picked, and well selected grapes into a stone jar, and pour on them 6 quarts boiling water; when the water has cooled enough, squeeze the grapes well with the hand; cover the jar with a cloth, and let it stand for 3 days; then press out the juice, and add 10 pounds crushed sugar. After it has stood for a week, scum, strain, and bottle it, corking loosely. When the fermentation is complete, strain it again and bottle it, corking tightly. Lay the bottles on their side in a cool place.

741. Fine Grape Wine. In order to make good wine it is necessary to have a good cellar, clean casks, press, etc. First of all, have your grapes well ripened; gather them in dry weather, and pick out carefully all the unripe berries, and all the dried and damaged ones; then mash them; or, if you have a proper mill for the purpose, grind them. Be careful not to set the mill so close as to mash the seed, for they will give a bad taste to the wine. If you wish to have wine of a rose color, let the grapes remain in a large tub a few hours before pressing. The longer time you leave the grapes before pressing, after they are mashed, the more color the wine will have. For pressing the grapes, any press will answer, provided it is kept clean and sweet. After you have collected the must in a clean tub from the press, transfer it into a cask in the cellar. Fill the cask within 10 inches of the bung; then place one end of a syphon, made for that purpose, in the bung, and fix it air-tight; the other end must be submerged fully 4 inches in a bucket of cold water. The gas thus passes off from the cask, but the air is prevented from coming in contact with the wine, which would destroy that fine grape flavor which makes Catawba wine so celebrated. When properly made, the must will undergo fermentation. When it has fermented, which will be in 15 days, fill the cask with the same kind of wine and bung it loosely for 1 week; then make it tight. Nothing more is needed till it is clear, which, if all is right, will be in the January or February following. Then, if perfectly clear, rack it off into another clean cask, and bung it up tightly until wanted. If the wine remains in the cask till about November, it will improve by racking it again. Be sure to have sweet, clean casks. Do not burn too much brimstone in the cask (*see No.* 736); much wine is injured by excessive use of brimstone—a mistake generally made by new beginners. Different qualities of wine can be made with the same grape by separating the different runs of the same pressing. The first run is the finest to make use of the first season; but it will not keep long without losing its fine qualities. To make good sound wine, that will improve by age, the plan is to mix all up together. The very last run will make it rough, but it will have better body and better flavor when 2 or 3 years old, and will improve for a number of years. The first run will not be good after 2 or 3 years.

742. To Fine Wine Difficult to Clarify, or Thick in Consequence of an Imperfect Fermentation. To clarify 60 gallons, take 1 ounce of the species of Dock or Rumex plant, called Patience root, which boil in 1 quart water. When cold, filter, and add 1 ounce common salt, then 1 glass sheep's blood. Beat all the ingredients well together with a broom until the mixture foams up well, then add it gradually to the wine, stirring continually while pouring it in, and for 15 minutes afterwards. In a few days the wine will be clear.

743. To Fine Madeira or any kind of Wine with Isinglass. To fine 40 gallons wine, steep 1 ounce isinglass in 1 pint of pure cold water over night, and then melt it over a gentle charcoal fire, until a uniform gelatinous mass is formed. When cool, mix with it 3 pints wine, and let it repose 12 hours in a moderately warm room. Then add 1 gallon wine and mix the whole in a wooden vessel; whisk it with a clean broom until it foams up. Pour this mixture gradually in the wine you desire to fine, being careful to stir the whole continually during the process. Bung up the cask, and in the course of 48 hours the wine will appear perfectly clear and bright. Isinglass prepared in this way will precipitate perfectly, and leave no particles suspended in the wine.

744. To Fine White Wine with Eggs. To fine 60 gallons white wine, take the whites of 5 or 6 fresh eggs, 1 egg-shell nearly reduced to powder, and a small handful of common salt. Beat the whole together in a little of the wine, with a small clean broom, until it foams, then pour it into the wine gradually, constantly stirring it all the while.

745. To Fine Red Wine. This is clarified in the same way. When you have Roussillon, or the dark wines called vin du midi, which are usually of a deep color, and wish to make it of a lighter color, add 5 or 6 eggs, yellows, whites, and shells together, with a small handful of salt.

746. To Fine a Pipe of Port Wine. Take the whites and shells of ten good eggs, and beat them up to a froth in a wooden bucket; add 1 gallon of Port and whisk it well up to a froth with a clean broom; draw off 4 gallons, and put the finings in it; stir it up well, leaving out the bung one day; then bung it up, and in ten days it will be fit to bottle. If the weather be warm, mix up 1 pint silver sand and add to the finings.

747. To Fine Wine, Cider, Ale, or Porter. Take 1 pound finely shredded isinglass, and macerate it in wine, sour beer, cider, or vinegar; add more of the liquid as the isinglass swells, until about a gallon has been used, agitation with a whisk being occasionally had recourse to, for the purpose of promoting the solution. As soon as the whole of the isinglass is dissolved, the mixture is reduced to the consistence of thin syrup, with wine or the liquid that the finings are intended for. The whole is next strained through a cloth or hair sieve, and at once reduced to a proper state of dilution, by the addition of more liquor. A pound of good isinglass will make 10 to 12 gallons of finings. 1 to 1½ pints is the usual quantity for a barrel of ale or porter; and 1 quart for a hogshead of wine or cider.

748. To Decolor Wine. The color of wine is subject to change; naturally it is precipitated by age and exposure to the light; artificially it is removed by the action of lime-water, skimmed milk, milk of lime, and sometimes fresh-burnt charcoal. Wines that have acquired a brown color from the cask, or red wines that have become "pricked" (*see No.* 752), or dark wines of any kind, may easily be turned into white wine by employing either of the above substances. In this way brown Sherry is commonly changed to pale Sherry; for this purpose 2 or 3 pints of skimmed milk are generally sufficient to decolor a cask of wine; but when it is found necessary to change the color of red wine, 2 or 3 quarts or more will be required. Charcoal is not often used, as it affects the flavor as well as color of wine. A little milk of lime may sometimes be substituted for milk, especially when the wine to be decolored is very acid, and red wines may be rendered quite colorless by it.

749. To Remedy Ropiness in Wine. The peculiar cloudy, stringy, oily appearance in wine, called by the French "graisse," and by the Americans "ropiness," is occasioned by the presence of a glutinous substance, and is generally observed in those white wines which do not contain much tannin. M. Francois, a chemist, first discovered the cause, and pointed out the proper remedy, in the addition of tannin. He recommended the use of 1 pound of the bruised berries of the mountain ash in a somewhat unripe state, well stirred in each barrel of the wine to be improved. After agitation, the wine is to be left to repose a day or two, and then racked off. The tannin in the berries by this time will have separated and precipitated the glutinous matter from the liquid, and removed the ropiness. Wines thus affected cannot be fined in the regular way, as they do not contain sufficient of the astringent principle to cause the coagulation or precipitation of the finings; this principle must therefore be supplied, and for pale white wines, which are the kind chiefly attacked with ropiness, nothing equals a little pure tannin or tannic acid dissolved in proof spirit. Red wines contain so much tannic acid that they are never troubled by ropiness. Wine, after having been cured of ropiness, should immediately be fined and bottled.

750. To Ripen Wine. Dealers adopt various ways to hasten the ripening of wine. One of the safest and best plans for this purpose, especially for strong wines, is to let them remain on the lees 15 to 18 months before racking off, or, whether "crude" or "racked," keeping them at a temperature ranging between 50° to 60° Fah., in a cellar free from draughts, and not too dry. Dealers sometimes remove the bungs or corks, and substitute bladders fastened air-tight. Bottled wine treated in this way, and kept at about 70° Fah., ripens very rapidly. 4 or 5 drops of acetic acid added to a bottle of some kinds of new wine, immediately gives it the appearance of being 2 or 3 years old.

751. To Remedy Sour Wine. The souring of wine is produced by various circumstances, sometimes from its having been kept in a warm cellar where it has been exposed to draughts of air, often by the vibration occasioned by the rolling of heavy bodies over the cellar; but most frequently it originates from the wine having been imperfectly fermented. The only safe remedy for the souring of wine is the cautious addition of a little neutral tartrate of potash; it may also be mixed with a larger quantity of rich wine of its kind, at the same time adding a little good brandy. Wine treated in this way should be fined after having stood 2 or 3 weeks, and then immediately bottled, and consumed as soon as possible, for it will never prove a good keeping wine. (*See No.* 761.)

752. To Restore Pricked or Decaying Wine. If the wine is only thick, add 2 pints of milk to every 30 gallons of wine, and stir 10 minutes. But if the wine has an inferior taste, or is partly or entirely spoiled, treat it as follows: Put the 30 gallons wine into a clean cask, then take 2 pints spirit of wine, 95 per cent.; 3 ounces common salt; 1 pound white sugar. Dissolve the salt and sugar in ½ gallon of the wine, and add the spirit. Then pour the whole gradually into the wine, being careful to stir it continually with a stick during the operation. After the mixture is all poured in the wine, stir the whole for 10 minutes longer. Then add 2 pints milk and continue stirring 10 minutes more. After some days the wine will be completely clarified and restored. "Pricked" wine signifies wine which has been slightly soured.

753. To Remedy Excessive Acidity in German Wine. Simply add a little chalk. This mode of correcting the sourness of wine is perfectly harmless, whereas the pernicious practice of using white and vitrified lead for this purpose cannot be too much condemned. Lead in any form is a poison.

754. To Restore Sour Wine with Potash. To 25 gallons wine, add 4 ounces potash dissolved in a little water, and stir well with a stick for 10 minutes.

755. **To Test Wines Beginning to Decompose.** Many persons are unaware of the difference between a wine that is beginning to decompose (called in French the Poux), and that in which the acetous fermentation has commenced. The Poux appears at the bottom of the barrel, while acetification begins at the top. For the first stage of the Poux the wine becomes thick, and has a peculiar taste termed flat. For the second stage the wine becomes still more troubled, and has the taste of stagnant water. Finally, in the last stage, when the decomposition has reached its maximum, the wine becomes grayish and appears like muddy water. If some of the wine is put into a champagne glass and a pinch of tartaric acid is added, a red color will be produced, which will not be the case if the wine is in a state of acetous fermentation.

756. **Remedy for Decomposition in Wines.** As soon as discovered add tartaric acid in the proportion of 1½ ounces to every 20 gallons of the wine, and let it rest for a few days, when, if the wine has not regained its natural color, a little more tartaric acid must be added.

757. **Sweating In and Fretting In Wine.** The technical terms "sweating in" and "fretting in" are applied to the partial production of a second fermentation, for the purpose of mellowing down the flavor of foreign ingredients (chiefly brandy) added to wine. For this purpose 4 or 5 pounds sugar or honey, with a little crude tartar (dissolved), are commonly added per hogshead; and when the wine is wanted in haste, 1 or 2 spoonfuls of yeast, or a few bruised vine leaves are also mixed in, the cask being placed in a moderately warm situation until the new fermentation is established, when it is removed to the wine-cellar, and, after a few days, fined down.

758. **To Remove Mustiness from Wine.** The disagreeable taste in wine, generally known as mustiness, is occasioned by the presence of an essential oil. This may be removed by adding a little sweet or almond oil, and then violently stirring the wine for some time. The fixed oil attracts and seizes on the essential oil, and rises with it to the surface, when it is easily skimmed off, or the liquid under it drawn off. A few slices of burnt or toasted bread, or a little bruised mustard seed or coarsely powdered charcoal, will often have the same effect.

759. **Pasteur's Method of Preserving Wines.** M. Pasteur announced some time ago that wines became spoiled in consequence of the presence of microscopic organisms, which could be destroyed by exposing the wine, for a few moments only, to a temperature of 131° Fahr. A committee of experts was appointed to make a comparative examination of wines which had and which had not been subjected to heat; M. Lapparent being President, and M. Dumas and M. Pasteur assisting. They concluded that the preservation of wine in bottles is greatly improved by heating; that the destruction of the germs is perfect, without the least impairment of the taste, color, or limpidity of the wines.

760. **To Determine the Nature of Acidity in Wine.** If wine has undergone the acetous fermentation, then convert it at once into vinegar by one of the usual modes. But if its acidity proceeds from an excess of tartaric acid, this defect may be remedied by shaking the wine with a concentrated solution of neutral tartrate of potassa, which, with the surplus of tartaric acid, will form bitartrate of potassa, and precipitate as such. To discover the nature of the acidity, neutralize an ounce or so of the wine with some carbonate of soda, then add a small quantity of sulphuric acid, and boil up; if acetic acid or vinegar be present, it will be perceptible by its odor. (*See No.* 751.)

761. **Parent's Method of Preserving Wine.** This consists in the addition of a small quantity of tannin or tannic acid to the wine, which perhaps acts in a similar way, by destroying the vitality of the spores of the fungus, since a microscopic examination of wine known to contain these germs, within a few weeks after being treated with the tannin, has failed to detect the slightest trace. Indeed, wine which has already begun to change, and become turbid, can be restored to its primitive clearness, and with a great improvement in its taste. Care must be t however, to use only tannin which has prepared from the constituents of the g since the slightest proportion of the ext of nut-gall, although accomplishing the eral object of destroying the fungus, will part a peculiar taste, which never disapp

762. **Antiferments.** Substances in small quantities for arresting fermenta in cider, wine, and malt liquors. The fol ing formulæ are effective, and have the adv tage of being harmless. (*See No.* 835.)

763. **Antiferments for Cider.** phite (not sulphate) of lime in fine pow and as newly prepared as possible. Or parts sulphite of lime and 3 parts gro black mustard seed.

764. **Antiferments for Cider, Wi Malt Liquors. &c.** Grind or bruise toge er 13 pounds new mustard seed and 1 po cloves. This mixture may be used with without the addition of 10 ounces grou capsicum.

765. **To Induce Fermentation.** fermentation does not begin within a reas able time, raise the temperature by coveri the vessel with blankets, and moving it n to a fire. Or, warm a portion of the must a add it to the rest. A small quantity of yea previously well mixed with some of the liqu gently stirred in, will have the same effe Or, the must may be warmed by placi large stone bottles, filled with boiling wa and well corked, in the liquor.

766. **To Arrest Fermentation.** Di strip of linen or cotton, an inch wide seven inches long, into melted sulphur. ten a wire into the bung of a 60-gallon c so that the end will hang about the middle the inside of the cask, bend the end up form a hook, place the sulphur tape on hook, ignite it, and insert it in the cask, bun ing loosely. In about an hour the cask w be impregnated with sulphurous acid; withdraw the match, and fill up with win and bung up tight. This will stop furth fermentation. This is a good plan for whi wines, but not for red wines, as sulphur injures their color. Sulphite (not sulphate) lime is also sometimes employed to arrest mentation. (*See No.* 835.)

CORDIALS OR LIQUEURS

Cordials or Liqueurs. The materials employed in the preparation of cordials are rain or distilled water, white sugar, and clean, perfectly flavorless spirit. To these may be added the substances from which the flavor and aroma are extracted, which distinguish and give character to the particular cordial to be made, and also the articles employed as "finings" when artificial clarification is had recourse to. In the preparation or compounding of cordials, one of the first objects which engages the operator's attention is the production of an alcoholic solution of the aromatic principles which are to give them their peculiar aroma and flavor. (*See No.* 812.) This is done either by simple infusion or maceration, or by maceration and subsequent distillation, or by flavoring the spirit with essential oils. In the preparation of liqueurs, glycerine has been found to be admirably adapted for preserving the characteristic flavors of those compounds, and it has consequently become the great favorite of this class of manufactures. (*See No.* 725.)

768. **Cordials Made by Maceration, or with Essential Oils.** When essential oils are employed to convey the flavor, they are first dissolved in a little of the strongest rectified spirit of wine, and when added to the spirit they are mixed up with the whole mass as rapidly and as perfectly as possible by laborious and long continued agitation. The stronger spirit may be reduced to the desired strength by means of clear soft water, or the clarified syrup used for sweetening. The sugar employed should be of the finest quality, and is preferably made into syrup before adding it to the aromatized spirit; and this should not be added until the latter has been rendered perfectly fine by filtering or fining. Some spirits, as anise seed, etc., frequently require this treatment, which is best performed by running them through a fine and clean filter, having previously mixed them with a spoonful or two of magnesia. By good management, cordials thus made will be perfectly clear and transparent; but should this not be the case, they may be fined with the whites of about 12 or 20 eggs to the hogshead, or by adding a little alum, either alone or followed by a little carbonate of soda or potassa, both dissolved in water. In a week or a fortnight the liquor will be clear.

769. **To Make Doppelt Kummel or Caraway.** Dissolve separately, each in a little 95 per cent. alcohol, ¼ drachm oil of anise, and 5 drops each of the oils of calamus, bitter almonds, and coriander; dissolve also 1 to 1¼ ounces oil of caraway in sufficient alcohol (95 per cent.) to make a clear solution. Incorporate these with 40 gallons French proof spirit; and add 10 pounds sugar dissolved in 5 gallons water.

770. **To Make Anisette.** To 30 gallons French proof spirit add 4 ounces essence of star anise dissolved in 95 per cent. alcohol, and 105 gallons syrup of 10° Baumé. Stir for ½ an hour, settle and filter.

771. **To Make Curaçoa.** Slice the ou side peel very thin from 60 bitter orange infuse for 15 days with 4 drachms brui cinnamon, and 2 drachms bruised mace, in gallons 95 per cent. French spirit, stirri every day. Then add 25 pounds white su dissolved in 2 gallons water; color wi caramel (*see No.* 694); stir thoroughly, filter.

772. **To Make Maraschino.** Dissolv in 1¼ gallons 95 per cent. alcohol, 1½ ounce essence of maraschino, 1¼ drachms essence rose, ½ drachm essence of noyau, 5 drops essen of cloves, and 8 drops essence of cinnamon; ad ¼ gallon orris root flavoring. (*See No.* 66 Mix the above with 12 gallons 95 per cen alcohol and 26 gallons syrup of 30° Baum Stir thoroughly and filter.

773. **Superfine Maraschino.** 4 ounce essence of noyau; 1 ounce essence of rose; ounce essence of neroli (genuine); 4 drachms of mace, infused in 95 per cent. alcohol; pound cinnamon, infused in 1 quart of water 2 ounces cloves, infused in 1 pint of water; pounds orris root (powdered), infused in gallons 95 per cent. alcohol for 15 days. Dissolve the essences in 2 gallons 95 per cen alcohol. Mix, put into a barrel 41 gallons per cent. alcohol; add the aromas, in 4 gallo 95 per cent. alcohol; sugar syrup, 90 gallo 32° Baumé. Stir all the ingredients well gether for at least half an hour, and let mixture stand two weeks; then filter and

in the filter two or three sheets of filtering paper. (*See No.* 811.)

774. Maraschino. 1¼ ounces essence of maraschino, 1½ drachms essence of rose, ½ drachm essence of noyau, 8 drops essence of cinnamon, 5 drops essence of cloves, ½ pound orris root (powdered), infused in ½ gallon 95 per cent. alcohol for 15 days. Dissolve the essences in 1 gallon 95 per cent. alcohol. Mix, put in a barrel 12 gallons 80 per cent. alcohol and add 2 gallons 95 per cent. perfumed alcohol (as described above); sugar syrup, 26 gallons 25° Baumé's saccharometer. Mix and filter as directed in the last receipt.

775. Maraschino. 3½ ounces essence of noyau, 6 drachms essence of rose. Dissolve the above in ½ gallon 95 per cent. alcohol, and add 4 spoonfuls of magnesia, 1 gallon orange flower water, ½ pound cinnamon (bruised) infused in ½ gallon water, ¼ pound cloves (bruised), infused in ¼ gallon of water, 4 drachms mace infused in alcohol, 2 pounds orris root (powdered) infused in 2 gallons 95 per cent. alcohol for 15 days. Mix 41 gallons 80 per cent. alcohol, 90 gallons syrup 25 degrees Baumé, and add 4 gallons perfumed spirits, as described above. Stir and filter as already directed.

776. Curaçoa d'Hollande. 2 pounds Curaçoa orange peel, ½ pound Ceylon cinnamon. Let them soak in water; boil them for 5 minutes with the juice of 32 oranges and 14 gallons of white plain syrup; then add 6 gallons of 95 per cent. alcohol; strain, filter; color dark yellow with sugar coloring. This receipt will make a splendid curaçoa.

777. Curaçao. 2 ounces each essence of bitter oranges and neroli; ¼ ounce essence of cinnamon; 3 drachms mace infused in alcohol. Dissolve the above essences in 1 gallon 95 per cent. alcohol, then put in a clean barrel 13 gallons 85 per cent. alcohol, 26 gallons sugar syrup 30 degrees Baumé, and add 1 gallon perfumed spirit, as above. Color with saffron or turmeric.

778. Champion Anisette. Put into a barrel 30 gallons 85 per cent. alcohol. Add 4 ounces essence of anise seed, which dissolve in 2 gallons 95 per cent. alcohol. Add 103 gallons sugar syrup 10° Baumé. Stir 15 minutes and let it rest 4 or 5 days, then filter. Add 2 or 3 sheets of filtering paper. (*See No.* 811.)

779. Anisette. Put in a barrel 13 gallons 95 per cent. alcohol. Dissolve 3½ ounces essence of green-anise seed in 1 gallon 95 per cent. alcohol, and add ½ gallon orange flower water, 8 or 10 drops infusion of mace, and 5 drops essence of cinnamon. Then put in the barrel 26 gallons sugar syrup 25° Baumé. Stir and filter as directed in the last receipt.

780. Anise Seed Cordial. Dissolve 3 drachms of oil of anise seed in 2¾ gallons of 95 per cent. alcohol; then add 2½ gallons of fine white syrup, mixed with 4¾ gallons of water. Stir and filter.

781. Malliorca d'Espagne. 40 gallons 55 per cent. alcohol, 5 ounces essence green anise seed and 5 ounces essence of star seed dissolved in 95 per cent. alcohol, ½ drachm ether (to give the cordial age). Stir and filter.

782. Blackberry Brandy. To 10 gallons blackberry juice, and 25 gallons spirits 40 above proof, add 1 drachm each of oil of cloves and oil of cinnamon dissolved in 95 per cent. alcohol, and 12 pounds white sugar dissolved in 6 gallons water. Dissolve the oils separately in ½ pint 95 per cent. alcohol; mix both together, and use one half the quantity; if the cordial is not sufficiently flavored, use the balance.

783. Blackberry Brandy. ¼ ounce each of cinnamon, cloves, and mace, 1 drachm cardamom. Grind to a coarse powder; add to 16 pounds of blackberries, mashed, and 5 gallons of 95 per cent. alcohol. Macerate for two weeks; press it; then add 10 pounds of sugar, dissolved in 3¾ gallons of water. Filter.

784. Cherry Brandy. Mash 16 pounds of black cherries with their stones; 5 gallons 95 per cent. alcohol. Macerate for two weeks; press it; then add 10 pounds of sugar, dissolved in 3¾ gallons of water. Filter.

785. Peach Brandy. Mash 18 pounds of peaches, with their stones; macerate them for 24 hours with 4½ gallons of 95 per cent. alcohol and 4 gallons water. Strain, press, and filter; add 5 pints white plain syrup. Color dark yellow with burnt sugar coloring.

786. Imperial Peach Brandy. Take 4½ ounces powdered bitter almonds, 3½ gallons of 95 per cent. alcohol, 1¼ gallons of water. Mix together, and macerate for 24 hours; then add a strained syrup, made of 3½ pounds of sugar, 1 pint of peach jelly, 2¼ ounces preserved ginger, 1 lemon cut in slices, 1 drachm of grated nutmegs, 1 drachm of allspice in powder, and 5 pints of water boiled for 2 minutes. Mix the whole, and filter.

787. Peppermint Brandy. To 40 gallons proof spirit add 4 ounces essence of peppermint, dissolved in 95 per cent. alcohol. Color with ½ pound powder of turmeric infused in 1 gallon spirit 95 per cent. Use this infusion in such quantity as to get the proper shade.

788. Kirschenwasser. 100 gallons proof alcohol, 5 ounces essence of noyau, 2 drachms essence of rose. Dissolve the latter ingredient in some 95 per cent. alcohol and add a spoonful of magnesia, 2 pounds orris root (powdered), infused 15 days in 2 gallons 95 per cent. alcohol, 1¼ gallons sugar syrup. Stir, and filter if necessary.

789. Caraway Cordial. Dissolve 6 drachms oil of caraway in 3 gallons 95 per cent. alcohol; add a syrup made of 42 pounds of sugar and 4¾ gallons of water. Filter.

790. Ratafia. This word is derived from the Latin pax ratafiat (let peace be ratified). The Latins used to drink ratafia on signing their treaties of peace. Ratafia may be made with the juice of any fruit. Take 3 gallons cherry juice, 4 pounds sugar, dissolved in the cherry juice. Steep in 2½ gallons brandy 10 days 2 drachms cinnamon, 24 cloves, 13 ounces peach leaves, 8 ounces bruised cherry kernels. Filter; mix both liquors, and filter again.

791. To Prepare Cherry Juice by Infusion for making Cherry Bounce and Brandy. Put the cherries into barrels and cover them with 95 per cent. spirit; let them steep for 1 month, and stir them well every 8 days. Use the juice that runs off first, and repeat this operation 2 or 3 times. The last time, you may bruise the cherries and stones, and steep them all together to make cherry brandy.

792. To Prepare Cherry Juice for Boiling. Put the cherries in a kettle tinned inside, cover them with water, and boil them at a gentle heat for 1 hour. When cold put them into barrels and add 1 gallon 95 per cent. spirit to each 10 gallons of the juice.

793. To Make Cherry Bounce (Superfine). To 15 gallons cherry juice, add 15 gallons 80 per cent. spirit; 30 gallons Catalonia or Marseilles wine; 1½ ounces essence of noyau; 3 ounces mace infused in 1 quart 95 per cent. alcohol; ¼ pound cinnamon infused in ½ gallon water, ¼ pound cloves ground and infused in 1 quart of water. Put all the above ingredients in a clean barrel and add 60 gallons sugar syrup 25° Baumé. Stir up the ingredients well, and filter after 4 or 5 days. If the color is not deep enough add a little sugar coloring. The above receipt is to make 120 gallons, but a much smaller quantity may be made by reducing the quantity of each ingredient and observing the same proportion in all.

794. To make Cherry Bounce (Second Quality). To 12 gallons cherry juice, add 30 gallons 80 per cent. spirit; 30 gallons Catalonia or Marseilles wine; 3 ounces essence of noyau; ¼ pound cinnamon ground and infused in ½ gallon water; ½ pound cloves ground and infused in ½ gallon water; 1½ ounce mace infused in 1 pint 95 per cent. alcohol. Mix all the above ingredients in a clean barrel, and add 60 gallons sugar syrup 13° Baumé. Stir up all the ingredients well together, and filter after 4 or 5 days. Make the color a little darker with sugar coloring (*see No.* 694), and to give a good shade add a little archil.

795. To Make Guignolet, or French Cherry Bounce. To 20 gallons cherry juice add 7¼ gallons 95 per cent. spirit; 7½ gallons Catalonia or Marseilles wine; ¾ ounce powdered orris root (infused in 1¼ gallons 95 per cent. alcohol); ½ gallon cinnamon water (made as in last receipt); ½ gallon clove water (made as in last receipt); 1¼ ounces mace infused in 95 per cent. alcohol. Mix all the above ingredients in a clean barrel, and add 68 gallons sugar syrup 25° Baumé. Stir up the mixture and let it rest 8 days; then strain.

796. Cordials by Distillation. The solid ingredients should be coarsely pounded or bruised before digestion in the spirit, and this should be done immediately before putting them into the cask or vat; as, after they are bruised, they rapidly lose their aromatic properties by exposure to the air. The practice of drying the ingredients before pounding them, adopted by some workmen for the mere sake of lessening the labor, cannot be too much avoided, as the least exposure to heat tends. to lessen their aromatic properties, which are very volatile. The length of time the ingredients should be digested in the spirit should never be less than 3 or 4 days, but a longer period is preferable when distillation is not employed. In either case the time allowed for digestion may be advantageously extended to 10 or 15 days, and frequent agitation should be had recourse to. In managing the still, the fire should be proportioned to the ponderosity of the oil or flavoring, and the receiver should be changed before the faints come over, as the latter are unfit to be mixed with the cordial. The stronger spirit may be reduced to the desired strength by means of clear soft water, or the clarified syrup used for sweetening.

797. To Make Absinthe by Distillation. Put the following ingredients into a cask:—1½ pounds large absinthe, 2 pounds small absinthe, 2½ pounds long fennel, 2½ pounds star anise (breaking the star only), 2½ pounds green anise seed, 6 ounces coriander seed, and 1 pound hyssop; moisten the whole with a little water, allowing it time to soften and swell; then add 12 gallons 95 per cent. alcohol, and steep for 2 or 3 days; next add 10 gallons water, and let the whole steep for 1 day more. The water will reduce the alcohol to about 23 gallons of proof spirit. Distill it, and it will produce nearly 15 gallons absinthe of 65 to 70 per cent. strength. Change the receiver as soon as the spirit, as it comes from the worm, begins to assume a reddish tinge. Color the distilled product, by steeping in it for 10 or 15 days ½ pound mint leaves, ¼ pound melissa leaves, ½ pound small absinthe, 2 ounces citron peel, and ¼ pound bruised liquorice root. Strain and filter.

798. Absinthe by Distillation. This is made in the same manner as in the former receipt, with the following ingredients:—40 gallons 75 per cent. spirits, 20 pounds fennel, 20 pounds green anise, 16 pounds large absinthe, 1 pound coriander, and 20 gallons water. This is colored, after distillation, by adding 4 pounds small absinthe, and heating it again until as hot as the hand can bear; then extinguish the fire, let it cool, settle, and filter it.

799. Superfine Curaçoa. Charge of the still: 35 pounds green orange peel, or 50 pounds yellow; 25 gallons 95 per cent. alcohol; add 4 gallons water, making in all 29 gallons, at 90 per cent. Digest for 10 days, and stir daily. In making the above, the following directions must be carefully observed:—I. Distill very carefully. II. When you have drawn off 20 gallons, add 10 gallons water, to draw off the faints, which may be distilled again in the next distillation. III. To make superfine Curaçoa, distill over again in a water-bath, adding 5 gallons water. IV. To know when the faints are coming off, take a little in a glass as it flows, and add ½ water, as if for absinthe. When it no longer turns milky, the faints are coming off; reserve them for the next distillation. Reduce the Curaçoa above distilled to 82 per cent. Tralle's, which will give 26 gallons. Add 12 gallons 82 per cent. spirit, 7 gallons coloring (as given below), 90 gallons syrup 31° Baumé.

800. Coloring for Curaçoa. 3½ pounds Brazil wood; 1¼ pounds each Campeachy and yellow wood, 7 gallons 90 per cent. alcohol. Mix the above and heat in a water-bath, putting on the head. When the head begins to get hot, rake out the fire and let the whole cool together in the bath.

801. Superfine Maraschino. Charge of the still with water-bath: Take 70 pounds peach or apricot stones, wash with tepid water, and put them into a barrel, making a square hole 4 or 5 inches, in the head, for that purpose. Cover them with 35 gallons 95 per cent. alcohol, and let them steep for one month. Then distill the whole.

Note the following observations.—I. Before distilling, add 4 pounds of peach flowers. II. Keep the fire at the same degree of heat, or the Maraschino will have an oily taste. III. When nearly finished, add 10 gallons water, to draw off the faints, which will do for another distillation. Reduce the spirit above distilled to 82 per cent. and you will get 45 gallons. If you have not that quantity, add spirit of the same strength to make it up. Then add 90 gallons sugar syrup 32° Baumé. When you have not used peach flowers in the distillation, take 2 pounds orris root powder, and steep it in 2 gallons alcohol 95 per cent. for 15 days; then filter, and add it to the mixing, not to the distillation.

802. Boitard's Anisette. Charge of the still, water-bath: 20 pounds green anise (washed in river water), 3 pounds star anise (being careful to break the stars only), 1 pound coriander seed (bruised), 40 gallons 95 per cent. alcohol. Put the above into the water-bath with 4 gallons water, and distill. After distilling 35 gallons, add 10 gallons of water to bring off the faints, which may be distilled again. The first 5 gallons of faints may be added to the distilled spirit, which will give 40 gallons aromatized alcohol. Reduce this to 80 per cent. by adding, say 5 gallons distilled water, and then add 90 gallons fine white sugar syrup, 31° Baumé. This will give 135 gallons fine anisette.

803. Chauvet's Anisette. Charge of the still, water-bath: 20 pounds green anise, 1¼ pounds coriander seed, 2 drachms neroli, 7¼ pounds star anise (break the stars only), 1½ pounds orris root powdered, 40 gallons 95 per cent. alcohol. Treat precisely as in the last receipt. Reduce the perfumed alcohol to 82 per cent. by adding 4 gallons water, and further add 1½ gallons double orange flower water, and 90 gallons white syrup 31° Baumé. Stir well and let it rest 5 to 8 days, then filter through blotting paper. This will give 135 gallons superfine anisette.

804. Marasquino di Zara. Charge of the still, water-bath: 18 pounds raspberries, 6 pounds orange flowers, 12 pounds sour red cherries (Morello). Mash the whole to a pulp with stones, macerate 24 hours with 7 gallons 95 per cent. alcohol and 7 gallons of water. Distill from off the water, 6 gallons flavored alcohol, and add 14 gallons of the whitest plain syrup about 34° Baumé.

805. Malliorca d'Espagne. Charge of the still, water-bath: 40 gallons 55 per cent. alcohol, 18 pounds green anise seed, 5 gallons river water. Put into the water-bath only 20 gallons of the alcohol, and 5 gallons river water. When 18 gallons are distilled off, add the remaining 20 gallons of alcohol, and continue the distillation until 18 gallons more are obtained, which mix with the 18 gallons previously obtained, and add one drachm of ether to give it age.

806. Elixir Vegetal de la Grande Chartreuse. Macerate 640 parts by weight, each, of the fresh herb of sweet balm and hyssop, 320 parts of fresh root of angelica, 160 of cannella, and 40 each of Spanish saffron and mace, in 10,000 parts of alcohol, for eight days. Then distill it onto a certain quantity (which varies according to the color desired) of fresh balm and hyssop; after a time these are expressed, the liquor sweetened with 1250 parts of sugar, and filtered.

807. Fining with Isinglass for Cordials. Take half an ounce of the best isinglass, and dissolve it over a gentle fire, in a pint of water slightly seasoned with good vinegar, or three tea-spoonfuls of lemon juice. Beat it from time to time, adding a little of the seasoned water. When you obtain a complete solution, gradually add the foaming liquid to the cordial, stirring all the while. Then stir for 15 minutes after it is all added, and let it rest for 3 days; by that time the cordial will be bright and clear. The above quantity is sufficient to clarify 25 gallons of cordial.

808. Fining with Eggs for Cordials. Take the whites of 4 eggs, beat them to a stiff froth, add a little alcohol, and mix it gradually with 20 gallons of cordial, stirring all the while, and it will soon clarify the liquor.

809. Fining with Potash for Cordials. 2 ounces of carbonate of potash (salts of tartar), dissolved in a quart of water, is sufficient to settle 20 gallons of cordial; add and stir as directed above.

810. Fining with Alum for Cordials. 6 drachms of powdered calcinated alum, dissolved in alcohol, is sufficient to clarify 20 gallons of cordial; add as directed above.

811. Filter Bags for Cordials. The filter bags used for rendering cordials transparent are made of flannel, felt, Canton flannel, and other materials, according to the thickness or density of the liquor, and are generally of a conical shape. In order to perform the operation of filtering cordials thoroughly, it is necessary that there should be placed inside of each bag 1 or 2 sheets of filtering paper prepared as follows: Rub each sheet of paper until it becomes soft and flimsy, like a piece of cloth, then tear it in small pieces and place it in a pail, pour over it a little boiling water, and rub and beat it up until it becomes a soft pulp; afterwards add more water, and continue the same as if you were beating up eggs. When the pulp assumes the appearance of a fine paste, fill up the pail with water and throw the contents into the filter; as soon as the water has run through, fill up the filter again so as to keep it full. When the liquid runs clear and limpid let it all run through, and commence filtering the cordial, being careful to keep the filter always full. If the liquor does not run clear, add about 2 ounces of granulated animal charcoal (sifted and fanned from the dust) to each filter. The charcoal should be washed with a little muriatic acid before being used.

812. The Aroma of Cordials. It requires a great deal of experience to combine different perfumes to produce any certain required aroma, a knowledge is necessary of the effect produced by perfumes in combination. The mere facts laid down in receipts will not be sufficient for a liquor manufacturer; he must know just what, and how much of it to use, to counteract what is objectionable, and produce or increase the correct aroma. He will frequently find that a single aromatic perfume fails to give the effect he anticipated; and yet the addition of a mere atom of some other perfume may be all that is required. Thus, the flavor of star-anise is accompanied by a slight, but objectionable odor of bedbugs; a very small addition of green anise and fennel counteracts this. Ambergris, alone, gives scarcely any perfume, but musk brings it out. The quince has a peculiar taste which is corrected by cloves; the after-taste of cinnamon is also destroyed by cloves; vanilla has more flavor if pounded with sugar than when ground with it. Absinthe requires the zest of the lemon to take away its naturally bitter taste. These examples will show that considerable experience is needed to be able to blend perfumes with any degree of success. (*See No.* 767.)

813. Imitation Peach Brandy. Take ½ gallon honey dissolved in water; 3¾ gallons alcohol; ½ gallon Jamaica rum; 1 ounce catechu, bruised to a paste; 1 ounce acetic ether. Add water to make 10 gallons, flavored with 4 ounces of bitter almonds. No coloring required.

BITTERS

Bitters. Bitters are considered as tonic and stomachic, and to improve the appetite when taken in moderation. The best time is early in the morning, or an hour before meals. An excessive use of bitters tends to weaken the stomach. They should not be taken for a longer period than a fortnight at one time, allowing a similar period to elapse before again having recourse to them.

815. To Make French Cognac Bitters. Take 1¼ pounds each red Peruvian bark, calisaya bark, bitter orange peel, and sweet orange peel; 2 ounces calamus root; 4 ounces cardamom seeds; 1¼ ounces each cinnamon, cloves, and nutmegs; 4 ounces caraway seed, and 3 pounds wild cherry bark. Pound all these ingredients to a coarse powder and steep for 15 days in 45 gallons proof spirit (or 60 gallons spirit 25 below proof), stirring occasionally. Then rack it off, and mix sufficient caramel (*see No.* 694) to make it a dark red; add 15 pounds white sugar dissolved in 15 gallons water; let the whole settle, then filter. If the bitters are required to be of an amber color, omit the wild cherry bark and the caramel coloring.

816. To Make Angostura Bitters. Take 4 ounces gentian root; 10 ounces each calisaya bark, Canada snake-root, Virginia snake-root, liquorice root, yellow bark, allspice, dandelion root, and Angostura bark; 6 ounces cardamom seeds; 4 ounces each balsam of tolu, orangetis, Turkey rhubarb, and galanga; 1 pound orange peel; 1 pound alkanet root; 1¼ ounces caraway seed; 1¼ ounces cinnamon; ½ ounce cloves; 2 ounces each nutmegs, coriander seed, catechu, and wormwood; 1 ounce mace; 1¼ pounds red saunders, and 8 ounces curcuma. Pound these ingredients and steep them as in the last receipt, in 50 gallons spirit; and, before filtering, add 30 pounds honey.

817. Amazon Bitters. Take 90 gallons plain proof spirit; 3½ pounds red Peruvian bark; 3½ pounds calisaya bark; 1½ pounds calamus root; 4¾ pounds orange peel; 3½ ounces cinnamon; 3½ ounces cloves; 3½ ounces nutmeg; 2 ounces cassia buds; 6½ pounds red saunders. First mash all the ingredients, put them in the spirit, and let them infuse 14 days, being careful to stir the mixture well twice every day. Then rack off and color with 11 pints brandy coloring, to get a dark red tint. Stir ¼ hour. Dissolve 30 pounds white sugar in 30 gallons water; add, and again stir ½ hour. Let the mixture rest 4 or days, and when bright, bottle. If the red saunders is not used, the color will be a bright amber. This is the finest bitters in the market. Compounded according to the abo directions, the dealer will obtain 120 gallons 25 below proof.

818. Boker's Bitters. Take 1½ ounces quassia; 1½ ounces calamus; 1½ ounces catechu (powdered); 1 ounce cardamom; 2 ounces dried orange peel. Macerate the above 10 days in ½ gallon strong whiskey, and then filter and add 2 gallons water. Color with mallow or malva flowers.

819. Stoughton Bitters. To 12 pounds dry orange peel, 3 pounds Virginia snake-root, 1 pound American saffron, 16 pounds gentian root, add 1 pound red saunders. Grind all the above ingredients to a coarse powder, and macerate for 10 days in 20 gallons 65 per cent. alcohol, then filter.

820. Stoughton Bitters. (Another Receipt.) 2 pounds ginsing; 2 pounds gentian root; 1½ pounds dry orange peel; ¼ pound Virginia snake-root; 1 ounce quassia; ¼ pound cloves; 3 ounces red saunders wood; 3 gallons alcohol 95 per cent.; 3 gallons soft water. Grind all the ingredients to coarse powder, infuse 10 days, and filter.

821. Wild Cherry Bitters. Take of wild cherry bark, 4 pounds; squaw vine (Partridge berry), 1 pound; Juniper berries, 8 ounces. Pour boiling water over the above and let it stand for 24 hours; strain, and pour again boiling water on the ingredients; let it macerate for 12 hours, then express and filter through paper, so that the whole will make 5 gallons, to which add of sugar, 3½ pounds; molasses, 1½ gallons; tincture of peach kernels, 6 ounces; tincture of prickly ash berries, 3 ounces; alcohol, 2 quarts.

822. To Make Peruvian Bitters. Take 8 ounces red Peruvian bark; 8 ounces orange peel; 1½ drachms each cinnamon, cloves, and nutmeg; and 75 cayenne pepper seeds. Infuse them, well bruised, in 8 gallons proof spirits, for 15 to 20 days, stirring every day. Draw off and filter.

823. Brandy Bitters. Grind to coarse powder 3 pounds gentian root, 2 pounds dry orange peel, 1 pound cardamom seeds, 2 ounces cinnamon, 2 ounces cochineal. Infuse 10 days in 1 gallon brandy, 8 gallons water, and filter.

824. Nonpareil Bitters. Grind to coarse powder 2 ounces Peruvian bark, ½ ounce sweet orange peel, ½ ounce bitter orange peel, 25 grains cinnamon, 25 grains cloves, 25 grains nutmeg, 15 cayenne seeds. Infuse ten days in 2 gallons 65 per cent. alcohol, then filter.

825. Spanish Bitters. Grind to coarse powder 5 ounces polypody, 6 ounces calamus root, 8 ounces orris root, 2½ ounces coriander seed, 1 ounce centaurium, 3 ounces orange peel, 2 ounces German camomile flowers; then macerate with 4¼ gallons 95 per cent. alcohol and add 5¼ gallons water and 1½ ounces of sugar. Filter and color brown.

826. Aromatic Bitters. Macerate 2¼ pounds ground dried small orange apples, ½ pound ground dried orange peel, 2 ounces ground dried calamus root, 2 ounces ground dried pimpinella root, 1 ounce ground dried cut hops, for 14 days, with 10 gallons of spirit at 45 per cent.; press, and add 2½ pints brown sugar syrup. Filter. Color dark brown.

827. Stomach Bitters. Grind to a coarse powder ½ pound cardamom seeds, ¼ pound nutmegs, ¼ pound grains of Paradise, ¼ pound cinnamon, ¼ pound cloves, ¼ pound ginger, ¼ pound galanga, ¼ pound orange peel, ¼ pound lemon peel; then macerate with 4¼ gallons 95 per cent. alcohol, and add a syrup made of 4½ gallons water and 12 pounds sugar; then filter.

828. Hamburg Bitters. Grind to a coarse powder 2 ounces agaric, 5 ounces cinnamon, 4 ounces cassia buds, ½ ounce grains of Paradise, 3 ounces quassia wood, ¼ ounce cardamom seeds, 3 ounces gentian root, 3 ounces orange apples dried, 1½ ounces orange peel; macerate with 4¼ gallons 95 per cent. alcohol, mixed with 5¼ gallons water; add 2¼ ounces acetic ether. Color brown.

829. Bitters made with Essences. 40 gallons proof spirit, 1 drachm oil of anise, 1 drachm oil of caraway, ½ drachm oil of cloves, 1 drachm oil of lemon, 1 drachm oil of oranges, 1 drachm oil of cinnamon, ½ drachm oil of bitter almonds, 1 gallon sugar syrup. Cut the oils in 95 per cent. alcohol, and mix. Color with brandy coloring.

830. Bitter Filter. A fine bitter filter may be made according to fig. 5, No. 17.

831. Orange Bitters. Macerate 6 pounds orange peel for 24 hours with 1 gallon water, cut the yellow part of the peel from off the white, and chop it fine; macerate with 4¼ gallons 95 per cent. alcohol for two weeks, or displace (*see No.* 41); then add a syrup made of 4½ gallons water and 16 pounds sugar. Filter through Canton flannel.

CIDER

Cider. To make good cider the apples should be allowed to hang on the tree as long as the wind and frosty nights will let them. The riper they are, the better the cider. They are picked up and placed in a large heap, either in the orchard or at the cider mill, and are allowed to lie a few days to complete the ripening process, in which the starch is converted into sugar, and if any are found bruised or rotten, put them in a heap by themselves, for an inferior cider to make vinegar. They are then rasped or ground into pulp. If the weather is cool and the apples are not quite ripe, it is better to let the pulp remain in the vat a few days before pressing out the juice. This gives the cider a higher color, makes it sweeter, and of better flavor.

833. To Press the Apples. The process of pressing is simple, but requires some skill. 4 boards about 6 inches wide are nailed together in a square, the size it is desired to make the cheese, say from 4 to 5 feet. This is placed on the bottom of the press, and a little clean rye or wheat straw, pulled out straight into bundles, is put inside, with the ends extending about a foot all around. The pulp is then put into this rim, forming a layer about 6 inches thick; the straw is then turned on it, and a little pulp placed on the straw to keep it down. The rim is then lifted and a stick is placed at each corner on the layer of pulp added, and the straw turned over it as before. This process is repeated until the cheese is as large as desired, using say from 75 to 100 bushels of apples. When they can be obtained use hair cloths instead of straw, to place between the layers of pomace. The straw, when heated, gives a disagreeable taste to the cider.

834. Sweet or Unfermented Cider. The cider will commence to flow at once, and it is better to let the cheese settle down somewhat before turning the screw. If pressed too much at first, the pulp may burst out at the sides. As the cider runs from the press, let it pass through a hair-sieve into a large open vessel, that will hold as much juice as can be expressed in one day. The cheese is generally allowed to remain under the press all night, and before leaving it in the evening, the screw is turned as tight as possible. In the morning additional pressure is given, and when the cider has ceased to flow, the screw is turned back, the boards taken off, and the corners of the cheese are cut off with a hay knife and the pomace laid on the top. The pressure is again applied, and the cider will flow freely. As soon as it ceases, remove the pressure and cut off 4 or 5 inches of pomace from the sides of the cheese, place it on top, and apply the pressure again as long as any cider will flow. 8 bushels of good apples will make a barrel of cider. In a day, or sometimes less, the pomace will rise to the top, and in a short time grow very thick; when little white bubbles break through it, draw off the liquor by a spigot placed about 3 inches from the bottom, so that the lees may be left quietly behind. The cider is usually put in barrels at once, and sold while sweet.

835. To Preserve Cider. Strictly speaking, we suppose the sweet juice of the apple is not cider, any more than the sweet juice of the grape is wine. It is converted into cider by fermentation. Those who prefer sweet cider resort to various methods for arresting this process, such as putting a handful of powdered clay into each barrel, or 2 or 3 pounds of well burned charcoal. Others add a little mustard seed, about a gill of seed to each barrel. Sometimes a few gallons of cider are placed in the barrel, and then a rag dipped in brimstone is attached to a long tapering bung; this is ignited and the bung loosely inserted. After the brimstone is consumed, the barrel is rolled until the cider has absorbed the sulphurous acid gas. The barrel is then filled up with cider. The sulphurous acid gas acting on the albuminous matter in the cider arrests fermentation. The objection to this method is that, if too much gas is absorbed, it may prove unpleasant, if not injurious. To obviate this, sulphite of lime is now used, which has the property of checking fermentation, making the cider perfectly clear, and imparting an agreeable taste. We have tasted cider preserved in this way that was excellent, and we have also tasted some that was execrable; but this may have been more the fault of the material than of the method. When the cider in the barrel is in a lively fermentation, add as much white sugar as will be equal to ¼ or ½ pound to each gallon of cider (according as the apples are sweet or sour), let the fermentation proceed until the liquid has the taste to suit, then add ¼ ounce of sulphite (not sulphate) of lime to each gallon of cider; shake well, and let it stand 3 days, and bottle for use. The sulphite should first be dissolved in a quart or so of cider before introducing it into the barrel of cider. Agitate briskly and thoroughly for a few moments, and then let the cider settle The fermentation will cease at once. When, after a few days, the cider has become clear, draw off and bottle carefully, or remove the sediment and return to the original vessel. If loosely corked, or kept in a barrel on draught, it will retain its taste as a still cider. If preserved in bottles carefully corked, which is better, it will become a sparkling cider, and may be kept indefinitely long. (*See Nos.* 762 *&c.*) Some think that cider, when treated by this method, is liable to induce cramps and loss of appetite, but we have never experienced any such unpleasant results from its use. Another plan, which, however, we have not tried, but is strongly recommended, is to mix 1 pint of hard-wood ashes (hickory is best) and 1 pint fresh slaked lime with 1 quart of new milk; this mixture is to be stirred into each open barrel of cider; after remaining quiet for about 10 hours the pomace will rise to the surface, and may be skimmed off; the clear cider can be drawn off by means of a faucet inserted near the bottom of the barrel; it is advisable to strain it as it is drawn off, to separate any hardened pomace that may remain in it. (*See Nos.* 852 *and* 853.) Whatever method be adopted, the cider must be drawn off into very clean, sweet casks, and closely watched. The moment white bubbles are perceived rising at the bung-hole, rack it again. When the fermentation is completely at an end, fill up the cask with cider in all respects like that already contained in it, and bung it up tight. The most perfect plan for excluding all action of the air from the surface of the cider, and preserving it sweet, is the addition of a tumbler of sweet oil before finally closing the bung-hole. It is not an easy matter to keep cider sweet and pure for any length of time, especially if the weather is warm. If the cider is not made until just before winter sets in, and can afterwards be kept at or near the freezing point, it will remain sweet and excellent.

836. Rules for Making Good Pure Cider. Always choose perfectly ripe and sound fruit.

Pick the apples from the tree by hand. Apples that have been on the ground any length of time contract an earthy flavor, which will always be found in the cider.

After sweating, and before being ground, wipe them dry, and if any are found bruised or rotten, put them in a heap by themselves, from which to make an inferior cider for vinegar.

As fast as the apples are ground, the pomace should be placed in a previously prepared open vat, of suitable size, and with a false bottom, strainer, or clean straw about it. Let the pomace remain about one day, then draw off, return the first, and continue to do so until it runs clear. Let the juice percolate or filter for one or more days. The cider thus extracted will compare closely with any clear, rich syrup, and is alone deserving the name of temperance cider, and may be drank, or used for many purposes, as a choice and superior article. In this way, about one-third of the cider will separate; the balance may then be expressed by the use of the press.

To press out the juice, use a clean strainer cloth inside the curb, with some clean straw intermixed in thin layers with the pomace, and apply the power moderately.

As the cider runs from the vat or press, place it in a clean, sweet cask or open tub, which should be closely watched, and as soon as the little bubbles commence to rise at the bung-hole or top, it should be racked off by a spigot or faucet placed about 2 inches from the bottom, so that the lees or sediment may be left quietly behind.

The vinous fermentation will commence sooner or later, depending chiefly upon the temperature of the apartment where the cider is kept; in most cases, during the first 3 or 4 days. If the fermentation begins early and proceeds rapidly, the liquor must be racked or drawn off and put into fresh casks in 1 or 2 days; but if this does not take place at an early period, but proceeds slowly, three or four days may elapse before it is racked. In general, it is necessary to rack the liquor at least twice. If, notwithstanding, the fermentation continues briskly, the racking must be repeated, otherwise the vinous fermentation, by proceeding too far, may terminate in acetous fermentation, when vinegar will be the result. In racking off the liquor, it is necessary to keep it free from sediment, and the scum or yeast produced by the fermentation. When the fermentation is completely at an end, fill up the cask with cider in all respects like that contained in it, and bung it up tight, previous to which a tumbler of sweet oil may be poured into the bung-hole, which will exclude the oxygen and prevent the oxidation of the surface of the wine.

Sound, well made cider, that has been produced as above directed, and without any foreign mixtures, is a pleasant, cooling and wholesome beverage; while, on the contrary, the acids and drugs added to already impure liquor, retard fermentation, thus adding poison to poison, producing colic, and not unfrequently incurable obstructions.

837. To Make Good Fermented Cider. To make good fermented cider that will keep a year or more without turning too sour to be used for anything but vinegar, is not a difficult matter. The first thing is to exclude all decayed fruit, but it should be quite ripe. Not a drop of water should be used in the process of manufacture. The sweeter the juice, the stronger the cider, and the better it will keep. Put the barrel immediately in a cool cellar—the cooler the better. The fermentation may go on slowly or rapidly, practice differing in this respect. In the former case the liquid is treated in all respects like wine. The cask has a bung in which is fixed, air-tight, a tin tube bent at right angles, or a piece of india-rubber tube. The free end of the tube in either case dips into a vessel of water. This arrangement allows the gases liberated in fermentation to pass out, and the end of the tube being covered with water, air cannot pass in. The bubbling of the gas through the water shows how the fermentation is progressing. When this has ceased, the cider is racked off into clean casks, which are to be full and bunged tightly. Much of the excellence of cider depends upon the temperature at which the fermentation is conducted; a point utterly overlooked by the manufacturers of this liquor. Instead of the apple juice, as soon as it is expressed from the fruit, being placed in a cool situation, where the temperature should not exceed 50° or 52° Fahr., it is frequently left exposed to the full heat of autumn. In this way much of the alcohol formed by the decomposition of the sugar is converted into vinegar, by the absorption of atmospheric oxygen, and thus the liquor acquires that peculiar and unwholesome acidity known as "hardness" or "roughness." When, on the contrary, the fermentation is conducted at a low temperature, nearly the whole of the sugar is converted into alcohol, and this remains in the liquor, instead of undergoing the process of acetification.

838. To Make Fine Cider by Another Process. After obtaining the juice as already directed (*see No.* 836), strain it through a coarse hair-sieve into open vats or close casks. When the liquor has undergone the proper fermentation in these close vessels, which may be best effected in a temperature of from 40° to 55° Fahr., and which may be known by its appearing tolerably clear, and having a vinous sharpness upon the tongue, any further fermentation must be stopped by racking off the pure part into open vessels, exposed for a day or two in a cool situation. After this the liquor must again be put into casks and kept in a cool place during winter. The proper time for racking may always be known by the brightness of the liquor, the discharge of the fixed air, and the appearance of a thick crust formed of fragments of the reduced pulp. The liquor should always be racked off anew, as often as a hissing noise is heard, or as it extinguishes a lighted match held to the bung-hole. When a favorable vinous fermentation has been obtained, nothing more is required than to fill up the vessels every two or three weeks, to supply the waste by fermentation. By the beginning of March the liquor will be bright and pure, and fit for final racking, which should be done in fair weather. When the bottles are filled they should be set by, uncorked, till morning, when the corks must be driven in tightly, secured by wire or twine and melted resin, or any similar substance.

839. To Prepare Casks for Cider. Cider should never be put into new casks without previously scalding them with water containing salt, or with water in which pomace has been boiled. Beer casks should never be used for cider, or cider casks for beer. Wine and brandy casks will keep cider well, if the tartar adhering to their sides is first carefully scraped off and the casks be well scalded. Burning a little sulphur in a cask will effectually remove must.

840. Canned Cider. Cider may be preserved sweet for years, by putting it up in air-tight cans after the manner of preserving fruit. The cider should be first settled and racked off from the dregs, but fermentation should not be allowed to commence before canning.

841. To Cleanse Cider Barrels. Tak lime water and a trace chain and put them i the barrel through the bung-hole, first securing a strong twine to the chain to draw it ou with. Then shake the barrel about until th chain wears or scours off all mould or pomac remaining in the barrel. Then rinse well wit water; after throwing out the rinsing wate put in a little whiskey, turning the barrel t bring it in contact with every part, and pou out all you can.

842. To Clarify and Improve Cider. Cider should be stored in a cool place, and should not be drunk before it becomes suff ciently matured. To improve the flavor of hogshead of cider, 1¼ gallons of good brandy or rum are frequently added, with 2 ounce powdered catechu (dissolved in water), pounds good moist sugar or honey, ¼ ounc each bitter almonds and cloves, and 4 ounce mustard seed. These must be well stirred in and occasionally stirred up for a fortnight after which it must be allowed to repose fo 3 or 4 months, when it will usually be found as bright as wine. Should this not be th case it must be fined with a pint of isinglas finings, or a dozen eggs, and in 2 weeks mo it will be fit for use. If the cider be preferre pale, omit the catechu, and instead of the isinglass, fine with 1 quart of skimmed milk. wanted of a light reddish or rose tint, use ounce cochineal, and omit the catechu.

843. To Bottle Cider. Preparatory t bottling cider it should be examined to s whether it is clear and sparkling; if not, should be clarified again, and left for tw weeks. The night before it is intended to b put into bottles, the bung should be left o of the cask, and left so until the next day when it may be bottled, but not corked dow until the day after, as, if this be done at onc many of the bottles will burst by keepin The best corks and champagne bottles shou be used, and it is usual to wire and cover t corks with tin-foil, after the manner of cha pagne. A few bottles may be kept in a war place to ripen, or a small piece of lump sug may be put into each bottle before corking, wanted for immediate use, or for consumptio during the cooler portion of the year; but f warm weather and for long keeping this inadmissable. The bottled stock should stored in a cool cellar, where the quality w be greatly improved by age.

844. Champagne Cider. Good cide pale, 1 hogshead; spirit, 3 gallons; honey o sugar, 20 pounds. Mix and let them re for 2 weeks, then fine with skimmed mil ¼ gallon. This will be very pale; and similar article, when bottled in champag bottles, and silvered and labeled, has bee often sold to the ignorant for champagne. opens very brisk if managed properly.

845. Fine Champagne Cider is made as follows:—To 100 gallons of good cider pu 3 gallons of strained honey, or 24 pounds o good white sugar. Stir well and set it aside for a week. Clarify the cider with half a gallon of skimmed milk, or ¼ pound of dissolved isinglass, and add 4 gallons of pure spirits After 2 or 3 days bottle the clear cider, and i will become sparkling. In order to produce a slow fermentation, the casks containing th fermenting liquor must be bunged up tigh It is a great object to retain much of the ca bonic gas in the cider, so as to develop itse after being bottled.

846. Champagne Cider. (Another ceipt.) 10 gallons of cider, old and cle Put it in a strong iron-bound cask, pitch inside (like beer-casks); add 2½ pints clarif white plain syrup; then dissolve in it 5 oun tartaric acid; keep the bung ready in ha then add 7¼ ounces of bicarbonate of potas bung it as quickly and as well as possible.

847. To Imitate Champagne Cid Cider will resemble champagne if you a tea-spoonful carbonate of soda, 2 tea-spo fuls fine sugar, and a table-spoonful brand a tumbler, and fill it up with sharp cider.

848. How to Imitate Cider. A very fair imitation cider may be produced by using the following receipt:—25 gallons soft water; 2 pounds tartaric acid; 25 pounds New Orleans sugar; 1 pint yeast. Put all the ingredients into a clean cask and stir them up well after standing 24 hours with the bung out. Then bung the cask up tight, add 3 gallons spirits, and let it stand 48 hours, after which time it will be ready for use.

849. To Imitate Sweet Cider. Take water, 100 gallons; honey, 5 gallons; catechu powdered, 3 ounces; alum, 5 ounces; yeast, 2 pints. Ferment for 15 days in a warm place (in the sun if possible); then add bitter almonds, ¼ pound; cloves, ⅛ pound; burnt sugar, 2 pints; whiskey, 3 gallons. If acid be in excess, correct by adding honey or sugar. If too sweet, add sulphuric acid to suit the taste. We should prefer to add cider vinegar for acidulating when necessary.

850. Cheap Imitation Cider. Take water, 35 gallons; sulphuric acid, enough to make the water pleasantly sour; brown sugar, 50 pounds; alum, 4 ounces; ginger, 5 ounces; cloves, 5 ounces; bitter almonds, 6 ounces. Boil the last 4 ingredients in 2 gallons of the water for 2 hours, strain, and add this decoction to the other water. Burnt sugar may be added, to color, if wished. From 3 to 4 gallons of whiskey, if mixed with it, will give more body. It is generally known, we suppose, that bisulphite of lime may be advantageously employed in fresh cider to stop its conversion to vinegar. (*See No.* 835.)

851. Cheap-made Cider. Take of good cider and water, 1 hogshead each; molasses, 50 pounds; alum, dissolved, ½ pound. Brimstone matches to stop fermentation, by burning.

852. To Keep Cider Sweet. Allow the cider to work until it has reached the state most desirable to the taste, then add 1½ tumblers grated horseradish to each barrel, and shake up well. This arrests further fermentation. After remaining a few weeks, rack off and bung up closely in clean casks.

853. To Clear Cider. To clear and improve cider generally, take 2 quarts of ground horseradish and 1 pound of thick gray filtering paper to the barrel, and either shake or stir until the paper has separated into small shreds, and let it stand for 24 hours, when the cider may be drawn off by means of a syphon or a stop-cock. Instead of paper, a preparation of wool may be taken, which is to be had in the market here, and which is preferable to paper, as it has simply to be washed with water, when it may be used again.

854. To Clean a Foul, Sour Cask, and Restore the Taste of the Wood. In order to accomplish this, dissolve about 1¼ pounds lime in 5 gallons boiling water. Rinse the cask to be restored with this liquid, and afterwards with boiling water. If the cask is very foul, it should also be rinsed with very dilute sulphuric acid after the lime water, and afterwards with boiling water. As a general thing, however, the lime water and boiling water are sufficient. To restore the natural taste of the wood, mash up in a mortar a handful of juniper berries and put them in the tainted cask, then pour over them several gallons boiling water, roll the cask violently, and set it first on one end, and then upon the other.

855. To Make Barrels Tight. Dissolve in a water-bath 1 pound leather scraps and 1 ounce oxalic acid, in 2 pounds water, and dilute gradually with 3 pounds warm water. Apply this solution to the inside of the barrel, where, by oxidation, it will assume a brown color and become insoluble in alcohol. This coat closes all the pores of the wood, and does not crack or scale off.

BREWING

Brewing. The art of brewing is simply and easily understood, cleanliness and attention being the principal points to be considered. It consists of five operations, namely: mashing, boiling, cooling, fermenting, and cleaning. The first process is simply to obtain an infusion of the malt. In the second, this infusion of malt is further impregnated with the flavor of the hops in the boiling, which is requisite for the preservation of the beer. In the third, this decoction or infusion is cooled down to the necessary heat for fermentation, which is excited with yeast, and which fills it with carbonic gas, giving to the liquor that pungent taste for which it is esteemed. After this it is fined, or cleansed, to render it fit for drinking.

857. Brewing Utensils. These utensils in a small way (say for a hogshead, or 54 gallons of beer), will consist of a copper capable of containing about 70 gallons; and if the brick edge at the top is made sloping, and covered with lead, it will prevent any waste of the wort in the boiling. A mash tub, with a false bottom about 3 inches above the other bottom, bored full of small holes, to prevent the malt stopping up the hole of the faucet. In many cases, for the sake of economy, an old worn-out birch-broom is cleaned and fastened before the hole of the faucet; and others again have two pieces of wood nailed together, and bored full of holes, which is fitted to the side of the tub, so as to cover the hole of the faucet. Any one of these contrivances is to prevent the malt or grains from flowing out with the wort, which would spoil its transparency. The tub must be sufficiently large to hold 10 or 12 bushels of malt, with plenty of room for mashing or stirring. An underback, to receive the wort from the mash tub. An oar, or rudder, to stir up the malt in the mash tub. Two or three coolers. These should be broad and flat, that the wort may cool quickly; for if the wort is too long cooling, it is likely to become sour in the coolers. These should also be raised a little at one end, that the wort may be run off at the lower end without being disturbed or shaken, and also that the sediment which falls down may not be again mixed with the wort. A fermenting tun. The mash-tub, when emptied of the grains, will also serve for this purpose. Casks, and oak stands for the casks and tubs to be placed on. The whole of these articles should be of a suitable size with the copper, which the cooper will always regulate, or in proportion to the quantity intended to be brewed.

858. Mashing. The purpose of mashing is to convert as much of the flour of the malt as possible into sugar, so that the extract drawn from it may contain the greatest amount of saccharine matter which it is capable of giving. To accomplish this perfectly will depend upon many contingencies—the heat of the water used in mashing, its quality, whether hard or soft, the most perfect mixing of the malt with the water, and the time of their remaining together. High-dried malt does not produce so much saccharine matter as pale malt. On the proper temperature of the liquor used will depend the goodness, flavor, and clearness of the extract drawn. When too high, or near the boiling point, the flour of the malt will be set, forming a kind of paste or starch, and the extract obtained will be little better than water. The surface of the grains after the mashing process is concluded will be covered with specks of white meal. The same appearance also shows itself when unmalted corn has been mixed with the malt. If the temperature be too low, the wort will be poor and devoid of strength, because the heat of the water is not sufficient to convert the flour of the malt into sugar, or to extract the saccharine matter from it. For pale malt the heat of the water must be higher than for brown, and so much the lower in proportion as the malt is browner. Thus, for the pale malt, the heat of the water for the first mash should be 178° Fahr.; for the second, 182°. Pale and amber mixed, or pale malt approaching to amber, 172° for the first mash; second, 178°. All amber, the first 170°; second, 176°. For very brown, or brown malt, such as is used for porter, 154° for the first; second, 164°. When hard water is used, the heat in each case should be about 2° less. An equal portion of pale, amber, and brown, or half pale and half brown—first heat, 160°; second, 166°. The time for the standing of the mash is from an hour and a half to two hours. In the summer months the mash should not stand so long by a quarter of an hour as it does in the winter. Heat the water in the copper to the required degree by Fahrenheit's thermometer. In taking the heat in the copper, if it is too hot, add cold liquor to bring it to the desired degree; but be careful to stir the hot and cold well together and mix it intimately, because the cold water, being heavier than the hot, sinks to the bottom. The heat of the water being now reduced to the proper degree in the tun, the malt must be stirred in gradually. It is best for one person to throw it in whilst another mixes it well and thoroughly by means of the oar, so that there may be no lumps or clots of malt left in it. The remainder of the water should be added by degrees, as the mash becomes too stiff to stir, until the whole is used. Reserve about ½ bushel of the malt to throw over the top when the mashing is finished. Cover the top of the tun with malt-sacks or cloths, to keep in the heat, and let it stand the required time. Turn the tap partially, to allow the wort to run out slowly, and draw off some in a pail or bucket. As the first running will not be clear, it must be put gently back into the tun; and if the second running is not sufficiently clear, turn the tap again, and let it remain a few minutes before drawing it off; then turn the tap partially as before, and draw it off into the underback, which must be placed underneath to receive it. As the wort runs out more slowly, the tap must be turned more fully, until the whole is nearly run out, and the bed of the grains looks dry; then turn the tap, to prevent any more running off. While the mash is standing, the copper should be again filled with water, and heated to the required degree for the second mash; this should be ready by the time the first wort is drawn off; then, with a bowl or ladle, pour over the top of the grains, as gently as possible, about half as much water as for the first; cover the mash-tun, let it remain about ten minutes or a quarter of an hour, and draw it off as before, pouring back the first running until it is fine. The wort from the first mashing is always the best and richest in saccharine or sweet matter. The proportion of wort to be obtained from each bushel of malt depends entirely on the proposed strength of the liquor required. To ale or beer of a superior kind the produce only of the first mashing should be used. For ordinary or usual drinking ale, take the produce of the first and second mashings, mix them well, and ascertain the gravity by a *saccharometer*. This is an instrument used by brewers for ascertaining the strength of wort; it is similar in principle to the hydrometer, but its scale denotes the pounds per barrel in excess of the weight of a barrel of water. The barrel or 36 gallons of water weighs 360 pounds; and, in examining a quantity of wort, if the saccharometer marks 60, it means that a barrel (36 gallons) of the wort would weigh 60 pounds more than a barrel of water, or 420 pounds. It is a sort of specific gravity, in which 360 is the unit instead of 1000; from which it can be seen that a saccharometer gravity of 420, as compared with 360, would be the same as 1166⅔ true specific gravity as compared with 1000. Some brewers express the strength of their wort by the whole weight of a barrel, others use only the excess of weight; thus, in the example above, some would call it wort of 420 pounds, others would say 60 pounds; either way is plain; the figures showing which plan is adopted. The usual limit for ale or beer is from 50 to 60 pounds, and for a very strong ale from 90 to 120 pounds per barrel. That made at the first gravity will be a brisk, lively and sparkling drink; but the last will be more heavy and glutinous, and can only be imperfectly fermented.

859. Boiling. As soon as the water is taken from the copper for the table-beer, damp the fire with ashes or cinders, and put in the wort. For every bushel of malt used, allow 1 pound hops, previously soaked in water taken from the first mash at 160° of heat; add half of them at first, and the other half after the wort has boiled half an hour. 2 pounds of hops by this method are considered to be equal to 3 pounds used in the ordinary way. The water in which they are steeped is strained off and put into the tun instead of the copper, which preserves the flavor of the hops. Let the wort boil as briskly as possible, for the quicker it is boiled the sooner it will break. Try it occasionally in a glass, and see if it has separated into large flakes; if it has not, boil it a little longer; when nearly ready, it will appear to be broken into fine particles. The extremes of under and over-boiling must be avoided, for when over-boiled it is with difficulty fined again in the casks.

860. Cooling. When the wort is ready, damp the fire, and draw it off into the coolers, keeping the hops well stirred to prevent their being burnt to the bottom; strain it through a hair-sieve to take off the hops. The coolers should be as shallow as possible, that the wort may not be too long in cooling, or it may chance to get sour, and should be of the same depth in each, that it may cool equally. When the first wort is drawn off, return the hops again into the boiler, with the wort for the table-beer, and let it boil quickly for one hour and a half; and if 1 pound coarse sugar or molasses, and 1 ounce salt, be added to every 10 gallons wort in the boiling, it will be much improved. When the wort has been cooled down to 75 or 80 degrees of heat by the thermometer (this will depend on the state of the atmosphere, for when the weather is warm it should be cooler), draw it off into the fermenting tun, without disturbing the sediment at the bottom, which gives the ale or beer a disagreeable taste. This is always observed by the Scotch brewers, but others consider that it feeds the beer, which it certainly does, and always use it; for whether it is the oleaginous quality of the hops, or the gluten extracted from the malt, which is precipitated by the boiling, it cannot be of any injury to the wort. If it is the first, it is of essential service to give the full flavor of the hops. In each case it will be thrown off in the working.

861. Fermentation. 3 pints good white fresh yeast will be about the quantity required to work a hogshead of beer; but in larger brewings this will depend on the quantity there is in a body, the gravity, and heat of the atmosphere—thus, the lower the gravity, the greater the bulk, and the warmer the weather, the less yeast must be used in proportion to work it, and *vice versa.* 3 pints being sufficient for a hogshead, a gallon will work 4 or 5 hogsheads in a body of the same gravity. First mix the yeast with a gallon or two of the wort, and a handful or two of bean or wheat flour in the fermenting tun; when the fermentation is brisk, pour over another portion, and as soon as the wort is at the proper degree of temperature run it into the tun, reserving out some of the ferment, to feed the beer as occasion may require. When it becomes languid, or if there is sufficient yeast in, it may be left out altogether. The fermentation should be gradual at first; for if it goes on too quickly the beer is likely to become foxed, that is, to have a rank and disagreeable taste. The next morning the beer should have a thin white creamy head; then, with a bowl or ladle, well rouse and mix it together. If, however, the fermentation has not been favorable, add some of the ferment; and if rather cold, wrap some sacks or old carpet round the tun, and place some more sacks over the top; also keep the door and windows closed. Or take a clean cask (the size according to the quantity of the gyle, or brewing), and fill it full of boiling liquor; bung it close, and put in the tun. In the evening rouse the head well in again; the next morning the beer should have what is termed a cauliflower-head; remove with the skimmer any patches of dark-brown yeast, and mix it well up together again. After the yeast has risen to the top, it will form a thick yeasty appearance, which should be skimmed off as soon as it is inclined to fall. A portion should then be taken out, tried with the saccharometer, and noted. If not sufficiently fermented, it should be tried every two hours until it is so, and the head may be skimmed off at the same time. When sufficiently reduced, cleanse it into the casks.

862. Cleansing. In cleansing ale or beer, the yeast should be skimmed from the top, and the liquor drawn off gently, so as not to disturb the bottoms. The casks should be plugged a little on one side, that the yeast may work and discharge itself at the bung-hole. A tub or pan must be placed underneath to receive the yeast as it works over. The greatest attention should be paid to the filling up of the casks with the wort that is left, which should be done every half hour at first, and as the working becomes more slow, every 3 or 4 hours, that the yeast may continue to discharge itself, otherwise it will fall to the bottom, and render the beer harsh and unpleasant, and liable to be excited on every change of the weather; but by attending to these precautions, this will be avoided, and the working of the beer will be sooner over. When the yeast has ceased to discharge itself, plug the casks upright, mix a pound of the best hops with some old ale or beer, and scald them in it over the fire. If the ale or beer is required to be drunk soon, this mixture should be added warm, otherwise add it when cold. Mix it well into the cask by means of a long stick, and bung the cask close; make a spile-hole near the bung, and put in a spile rather loosely at first, and after two or three days knock it in firmly.

863. Important Hints on Brewing. Small beer will require rather more yeast to work it than strong beer or ale. A portion of the wort at the temperature of 85 degrees should be mixed at first with the yeast. When the fermentation has commenced, the rest of the wort may be run into the tun at the heat of 75 degrees. It will not work so long nor so strongly as ale, and may be casked the next day. Attend to the filling of the cask as directed for ale. In about two days the fermentation will have subsided, and the cask should then be bunged close. The fermentation will always show whether the degrees of heat have been well taken, and the extract well made. If too high, the air-bladders on the head will be about as large as a dollar piece. If too low, there will be few or no bladders, or very small ones; but when well taken they will be in size about that of a 2 cent piece. The proportions of hops used for beer should be in accordance with the time it is to be kept. If for immediate use, 3 pounds will be sufficient for a coomb of malt (4 bushels). From 1 to 2 years, 4 pounds; old beer, 5 or 6 pounds. The same if the wort is very rich; or in proportion to its gravity use more hops, because beer or ale made from rich wort is always intended for long keeping. In general, 4 or 5 pounds of hops per coomb (4 bushels) is used for ales; but for porter, 5 or 6 pounds, and for bitter ale, about 8 or 10 pounds; but in all cases care should be taken that the hops are of the best quality. The private brewer will find about ¼ pound of raspings of quassia equivalent to 6 pounds of hops for preserving ale and imparting a pleasant bitter. Beer brewed for immediate use may be made from all pale malt, as it is more readily fermented than that from the browner sorts. It will not keep so well, and may be brewed almost in the hottest weather, as it need not be cooled below 70 or 75 degrees. A mixture of pale and amber malt should always be used for keeping beer, and the wort cooled down to 60 or 70 degrees before it is put into a state of fermentation; hence, from Autumn to Spring, or the months of October to March, have ever been deemed the most favorable months for brewing the best malt liquor, the former being considered the most fitted, as the beer has so many cold months immediately succeeding, for it to ripen and grow fine in: besides, it does not want such watching and tending as the March beer does, in putting in and taking out the spile or peg on every change of the weather. The proportion of wort to be obtained from every bushel of malt will depend entirely on the proposed strength of the liquor required. For ale or beer of a superior kind, the produce of the first mashing only should be used; but if the ordinary or usual driking ale is wanted, take the produce of the first and second mashings, and use the third for table beer.

864. Flavoring Beer. There are several simple and innoxious articles which can be used for this purpose by the private brewer—namely, Spanish liquorice, liquorice root, cardamom and caraway seeds, and dried orange peel powdered; these are very excellent when used judiciously. Honey is also an excellent assistant to beer and ale; about 2 pounds to a quarter (8 bushels) of malt being put into the copper just before the wort is turned out, or long enough to melt and incorporate with the mass. The same plan should be adopted with everything used for this purpose—that is, throwing it in when the wort is at the full boiling point, for then it will not fall to the bottom without mixing. When, however, Spanish liquorice is used, it will be necessary to tie it in a net bag and suspend it. Salt and ground ginger, or salt and any other spice, are excellent for cleansing beer.

865. Porter Brewing for Families. To make this beverage, three sorts of malt are required, namely: pale, brown, and blown malt. The peculiar flavor of this liquor is given by the brown and blown malt, and no other material or ingredient whatever is required different from other sorts of beer. The mixture of malt may be composed of half pale or amber, and half brown malt; or, take for a hogshead, 4 bushels of pale or amber malt, 2 of brown, and 14 pounds of patent blown malt, and 6 pounds of the best brown hops. These proportions will make excellent porter, but the following may be used for a second-rate quality:—2¼ bushels of amber, 1½ bushels of brown malt, and pounds of hops, with sufficient burnt sugar (*see No.* 694) to give the desired color; or it may be brewed with all amber malt, using blown malt, or sugar coloring, instead of the brown malt. The water for mashing must be lower than for beer or ale, and be reduced to 164 or 166 degrees for the first mash, according to the instructions already laid down. All the processes are conducted the same as for beer or ale, with this exception, that blown malt is boiled with the wort in a copper, and the second malt, boiled separate, should be boiled violently for 2 or 3 hours; and as there is generally but one quality of porter, the two kinds of wort are run together into the tun. 28 gallons of cold water may be run into the tun for table porter, which should be manag as table beer. If the color is not sufficiently high it may be heightened by using a pound of Spanish liquorice with the wort in the boiler, or by the addition of burnt sugar (*Caramel, see No.* 694.)

866. Hints on Fermentation. The fermentation of beer or ale is a very important part of the process of brewing. The quantity of extract obtained from the malt depends greatly upon the heat of the water used for mashing, and on the mashing process being properly conducted; but whether that extract be rich or poor, the flavor of the beer or ale, and its ultimate success in the cellar, depends upon the wort being properly and sufficiently fermented in the tun and casks. Fermentation increases the heat and decreases the gravity of the wort, altering altogether its original character by a decomposition of its parts, or a conversion of its saccharine principle into alcohol, which gives to it that vinous pungency for which it is esteemed. If the fermentation is not carried far enough, the abundant sweet principle of the wort will not be sufficiently changed to give it the necessary vinous taste, and it will be sickly and cloying, deficient of strength, and liable to become ropy. When the fermentation is carried too far in the tun, the vinous flavor is partly lost; and if still lower, the yeast becomes, as it were, fixed in it, from the ale or beer having lost its natural energy to throw it off, and it will have a flat, stale, and disagreeable taste. Fretting (*see No.* 757) then ensues in the cask, and from being deficient of body it soon becomes sour, unless speedily drunk. All beer for keeping should be fermented in the tun to about one-fourth its original gravity, in a temperature of the gyle not exceeding 70 degrees. Lighter beer about one-third; but in no case should it be allowed to reach so far as one-half. In winter, the fermentation of weak beer must not be carried quite so far as in the summer, as more unfermented matter must be left to nourish it in the cask during the cold weather, which will counteract its ripening. Some allowance should also be made for the time the ale or beer is intended to be kept. Strong wort will bear a greater proportionate fermentation than weak wort, and consequently be stronger and more sparkling. Beer of this kind, intended to be kept, should be fermented so low as to ensure transparency and softness, with a proper degree of strength, for it will have time to bring itself round. Still, care must be taken to leave a sufficient quantity of unfermented matter for the supply of the gradual decomposition, the quantity left being proportionate to the time the beer is intended to be kept. Wort of 50 or 60 degrees gravity (*see No.* 858) will keep well for 2 or 3 years, if reduced to two-fifths, or at least one-fourth. Ale is not fermented so much as beer, therefore a considerable portion of the saccharine matter still remains in the liquid, apparently unaltered. In conducting this process, both the thermometer and saccharometer must be the guide;—the last is indispensable. The results given by these should be carefully noted in a book kept for the purpose, with the heat of the atmosphere at the time the observations are made, which will serve as a guide for any future brewing. As soon as the head forms a brown, thick, yeasty appearance, and is inclined to fall, it must be immediately skimmed off. Particular attention must be paid to this point. It is at all times better to skim it before it begins to drop, than allow it to pass again through the beer, which will give it a rank, disagreeable taste, termed "yeast bitten;" neither will it fine well in the cask. After the head is skimmed off, a portion should then be taken out, tried by the saccharometer, and noted; and if it is not sufficiently fermented it should be roused well up, and skimmed every two hours until the required gravity is nearly attained, when it should be watched with the greatest attention, and cleansed with a little salt and bean-flour, and any other flavoring ingredient may then be added, such as ground ginger, cardamom, caraway seeds, &c., and well mixed with it immediately it is reduced to the desired point.

867. The Acetous Fermentation may arise from premature fermentation, through the mashing heat being taken too low, when it may commence in the tun, underback, or coolers. If in the mash tun, the wort will ferment very rapidly, and produce a large quantity of yeast; but of course the liquor will be soured, therefore less yeast will be required to ferment it. When the first mash is affected, all the subsequent ones will share the same fate, and no extra quantity of hops or boiling that may be given to it will restore it to a sound condition. It may also arise from the mashing heat being taken too high. When this is the case, the fermentation is languid, the yeast head is very low, and appears brown or fiery, accompanied with a hissing noise, and occasionally it will appear as if boiling. A larger quantity of yeast than usual is necessary to be added to wort of this description, to force the fermentation, and to discharge the yeast freely, in order that as little as possible may remain in the liquor, which would otherwise fret and become sour. The acetous fermentation may also arise from premature fermentation, either in the underback or coolers; hence, fretting ensues, and the liquor continually generates acidity.

868. To Correct Acidity in Beer. Acidity in beer may be neutralized by chalk, lime, alkalies, &c.; but it cannot be totally destroyed without spoiling the liquor.

869. Bittern. This is an adulterating mixture employed by brewers to impart a false bitter and strength to their liquors. Boil 4 parts Spanish liquorice in sufficient water until dissolved, and evaporate to the consistence of cream. Then add to it 1 part extract of quassia, 1 part powdered sulphate of iron, 2 parts extract of cocculus indicus, and 8 parts molasses.

870. Bitter Balls. These are used as a fraudulent substitute for hops in making beer, and are different in composition, to suit different kinds of malt liquor.

For ale: 2 pounds powdered gentian, and 1 pound extract of gentian, mixed with sufficient molasses to make a paste. Divide into ½ pound rolls.

For pale ale: 1 pound crude picric acid, 3½ pounds ground chamomiles, and ½ pound grains of Paradise, mixed with syrup.

For porter or stout: either of the above, with the addition of 1½ pounds Spanish liquorice softened with a little boiling water.

871. Fining for Ale or Beer. It frequently happens that malt liquor, especially porter, with all the care bestowed upon it in brewing, will not turn out sufficiently fine to meet the taste and eye of the consumer, in which case it is usually subjected to the operation of clarifying. For this purpose 1 ounce isinglass is put into 1 quart weak vinegar, or still better, hard beer, and when dissolved, a sufficient quantity of good beer may be added to make it measure 1 gallon. This mixture is called finings, 1 to 2 pints of which is the proper quantity for a barrel. The method of using it, is to put the finings into a bucket, and to gradually add some of the beer, until the bucket is three parts full, during which time it is violently agitated with a whisk, and this is continued until a good frothy head is raised upon it, when it is thrown into the barrel of beer, and the whole well stirred up, by means of a large stick shoved in at the bung-hole. In a few days the beer will usually become fine.

872. To Ascertain Whether Malt Liquor may be Clarified by Fining. In some bad sorts of beer, isinglass will have no effect. This may be ascertained beforehand, by trying some in a long glass tube, or vial, with a little of the finings. These should be well shaken together, and then set aside for a short time, when it will be found that the finings will rise to the top, leaving the central portion of the beer clear, if it be in a proper condition for clarifying; but if, on the contrary, they sink to the bottom, and the liquor still keeps foul, no quantity of finings, however great, will ever clarify it.

873. To Clarify Obstinate Ale. This latter defect may be remedied by proceeding to fine it after the manner above described, and then adding, after the finings have been well rummaged up, either 1 spoonful oil of vitriol or gum catechu, dissolved in ½ pint warm water, again stirring well for a quarter of an hour. Or 1 or 2 ounces tincture of catechu may be used instead, mixed with a little water. Either of these additions acts chemically on the finings, in the same way as good beer does, precipitating them along with the foulness, and thus brightening the liquor. The addition of a handful of hops, previously boiled for 5 minutes in a little of the beer, and then added to the barrel, and the whole allowed to stand for a few days, before proceeding to clarify it, will generally have the same effect.

874. To Ripen Beer. The addition of a small lump of white sugar to each bottle of ale or beer, and a tea-spoonful of moist sugar to each bottle of porter at the time of corking, will render it fit for drinking in a few days in ordinary weather. A raisin or lump of sugar candy is often added to each bottle with a like intention. The Parisians bottle their beer one day, and sell it the next. For this purpose, in addition to the sugar as above, they add 2 or 3 drops of yeast. Such bottled liquor must, however, be drunk within a week, or else stored in a very cold place, as it will otherwise burst the bottles, or blow out the corks.

875. To Give Beer the Appearance of Age. The addition of a very little diluted sulphuric acid to new beer will give it the appearance of being 1 or 2 years old. Copperas, alum, sliced lemons, oranges, and cucumbers, are also frequently employed by brewers for the same purpose.

876. Beer Heading. Alum and green copperas equal parts, both in fine powder; mix. Or, alum, copperas, and common salt, of each equal parts; mix. Used by brewers to make their beer keep its head.

877. To Remedy Mustiness in Beer. To each hogshead add 1 pound new hops boiled in a gallon of the liquor, along with 7 pounds newly-burnt charcoal coarsely bruised, and a 4 pound loaf of bread cut into slices and toasted rather black; rouse well every day for one week, then stir in moist sugar 3 or 4 pounds, and bung down for 2 weeks.

878. To Remedy Flatness in Beer. Stir a few pounds of moist sugar into each hogshead; fermentation will ensue in a few days, and the liquor become brisk. On the small scale, the addition of a few grains carbonate of soda or prepared chalk to each glass will make the liquor brisk and carry a head; but it must be drunk within a few minutes, else it becomes again flat. This is an excellent method when home-brewed beer becomes sour and vapid.

879. To Recover Frosted Beer. Frosted beer is best recovered by the addition of a few hops boiled in a little sweet wort; or by adding a little moist sugar or molasses to induce a fresh fermentation.

880. Foxing or Bucking Beer. Add some fresh hops, along with some bruised mustard seed, to the beer. Some persons add a little made mustard, or solution of alum or catechu, or a little diluted sulphuric acid, and stir it well; and in a week or 10 days afterwards, further add some bean-flour, molasses, or moist sugar.

881. To Remedy Ropiness in Beer. Add a little infusion of catechu and some fresh hops to the beer, and in a fortnight stir well, and the next day fine it down.

882. German Beer Bouquet. According to Dr. Boettger, this liquor consists of a solution of the essential oil of lemons in light petroleum oil, and a coarse fusel oil, containing spirit colored by turmeric.

883. Spring Beer. Boil down 3 small bunches each of sweet fern, sarsaparilla, wintergreen, sassafras, prince pine, spice wood, in 8 gallons water to 6 gallons of decoction or extract; strain; 4 gallons of water boiled down to 3 gallons of decoction, with ¼ pound hops; strain; mix the two extracts or decoctions together; dissolve in them 1 gallon of molasses, and, when cooled to 80° heat, 1¼ pound of roasted bread soaked in fresh brewers' yeast; fill up a 10-gallon keg; when fermentation is over mix with it the white of 1 egg beaten to froth; bung it, and bottle when clear.

884. Spruce Beer. Boil 9¼ gallons of water; let it cool down to 80° Fahr., and then dissolve 9 pounds of sugar in it, having previously mixed with it 1 ounce of essence of spruce; then add 1 pint of good brewers' yeast, and pour it in a 10-gallon keg until fermentation is over; then add a handful of brick powder and the white of 2 eggs beaten to a froth; mix with the beer, and let it stand till clear, then bottle.

885. To Make White Spruce Beer. Dissolve 10 pounds loaf sugar in 10 gallons boiling water, add 4 ounces essence of spruce; when nearly cold add ½ pint yeast. Keep in a warm place. Next day strain through flannel, put into bottles and wire the corks.

886. To Make Wood's Spruce Beer. Boil ½ pint essence of spruce, 5 ounces each of bruised pimento and ginger, and 5 or 6 ounces hops in 3 gallons water for 10 minutes. Then add 3 quarts molasses and 11 gallons warm water. When lukewarm add 1 pint yeast; ferment for 24 hours and bottle, as in last receipt. This will also make a white beer by substituting an equivalent of loaf sugar instead of the molasses.

887. To Make Spruce Beer. Take 2 ounces each hops and chips of sassafras root, 10 gallons water; boil twenty minutes, strain, and turn on, while hot, 1 gallon good molasses, and add 2 table-spoonfuls each essence of ginger and essence of spruce; 1 table-spoonful pounded allspice. Put into a cask, and when cold enough add 1 quart yeast; let it stand 24 hours; draw it off or bottle it.

888. Essence of Spruce. Take of the young branches of black spruce (abies nigra), make a decoction with water (*see No.* 34) and evaporate to the consistence of molasses. This is used for fabricating spruce beer—a right pleasant drink when it is fresh.

889. Root Beer. Take sarsaparilla (American), 2 pounds; spice wood, ½ pound; guaiacum chips, 1 pound; birch bark, ¼ pound; ginger, ½ ounce; sassafras, 4 ounces; prickly-ash bark, ½ ounce; hops, 1 ounce. Boil for 12 hours over a moderate fire, with sufficient water, so that the remainder shall measure 5 gallons, to which add tincture of ginger, 8 ounces; oil of wintergreen, 1 ounce; alcohol, 1 quart. This prevents fermentation. To make root beer, take of this decoction 1 quart; molasses, 8 ounces; water, 2½ gallons; yeast, 4 ounces. This will soon ferment and produce a good drinkable beverage. The root beer should be mixed, in warm weather, the evening before it is used, and can be kept for use either bottled or drawn by a common beer-pump. Most people prefer a small addition of wild cherry bitters or hot drops to the above beer. (*See Nos.* 821 *and* 891.)

890. Puffer's Root Beer. Prince's pine, 2 ounces; wild cherry, 2 ounces; hemlock bark, 2 ounces; wintergreen, 4 ounces; sassafras bark, 4 ounces; birch bark, 4 ounces; spice bark, 4 ounces; Jamaica ginger, 2 ounces; white mustard seed, 1 ounce. Put in a percolator and cover with boiling water; let it stand till cold, then strain; add to it enough boiling water to make 4 gallons. Take 1 gallon of this, add 1 gallon of molasses, or the same amount of syrup; to this add 8 gallons of water and about 1 pint of yeast. 1 pint of alcohol added will much improve its flavor, and it will keep longer.

891. Hot Drops. Take of tincture of myrrh, 1 ounce; tincture of capsicum, 2 ounces.

892. To Make Ottawa Root Beer. Take 1 ounce each sassafras, allspice, yellow dock, and wintergreen; ¼ ounce each wild cherry bark and coriander; ¼ ounce hops and 3 quarts molasses. Pour boiling water on them; macerate for 24 hours; then filter and add ½ pint yeast. Add about 6 gallons water, or to taste. In 24 hours it is ready for use.

893. To Make Superior Ginger Beer. Take 10 pounds of sugar, 9 ounces lemon juice, ½ pound honey, 11 ounces bruised ginger root, 9 gallons water, 3 pints yeast. Boil the ginger half an hour in 1 gallon water; then add the rest of the water and the other ingredients, and strain it when cold. Add the white of an egg beaten, and ½ an ounce essence of lemon. Let it stand 4 days, then bottle, and it will keep many months.

894. To Make Ginger Beer. Put into 1 gallon boiling water, 1 pound lump sugar, 1 ounce best unbleached Jamaica ginger well bruised, ¾ ounce cream of tartar and 2 lemons sliced; stir the ingredients frequently in a covered vessel until lukewarm; then add 1½ or 2 ounces yeast, and keep it in a moderately warm place so as to excite a brisk fermentation; the next day rack and strain through flannel; let it work for a day or two, then strain it again and bottle, wiring down the corks.

895. Ginger Beer Without Yeast. Boil 1½ pounds bruised ginger in 3 gallons water half an hour; then add 20 pounds white sugar, 1 pint lemon or lime juice, 1 pound honey, and 17 gallons water; strain through a cloth. When cold add the white of 1 egg, and ½ fluid ounce essence of lemon; after standing 3 or 4 days, bottle.

896. To Make Ginger Pop. Take 5½ gallons water, ¾ pound ginger root bruised, ¼ ounce tartaric acid, 2¼ pounds white sugar, whites of 3 eggs well beaten, 1 small tea-spoonful lemon oil, 1 gill yeast; boil the root for 30 minutes in 1 gallon of the water, strain off, and put the oil in while hot; mix. Make over night; in the morning skim and bottle, keeping out sediments.

897. To Make Ginger Pop. Take 2 ounces best white Jamaica ginger root, bruised; water, 6 quarts; boil 20 minutes, strain, and add 1 ounce cream tartar, 1 pound white sugar; put on the fire and stir until all the sugar is dissolved, and put in an earthen jar; now put in ¼ ounce tartaric acid, and the rind of 1 lemon; let it stand until 70° Fahr., or until you can bear your hand in it with comfort; then add 2 table-spoonfuls of yeast, stir well, bottle for use and tie the corks. Make a few days before it is wanted for use.

898. Wahoo Beer. Boil for 6 hours in 4 gallons water, 1 ounce each sarsaparilla, Solomon's seal, nettle root, and sassafras; 2 ounces each burdock root, comfrey root, and Prince's pine; 2 ounces sweet fern, ½ ounce wintergreen, and 4 raw potatoes cut up fine. Strain, and add 1 quart molasses for each 3 gallons of the strained liquor, and a browned loaf of bread. When cool, put in 1 pint of good yeast, and let it ferment for 24 hours. It will then be ready to be put in bottles or a keg.

899. Lemon Beer. Put into a keg 1 gallon water, 1 sliced lemon, 1 table-spoonful ginger, 1 pint good syrup, and ½ pint yeast. In 24 hours it will be ready for use. If bottled the corks must be tied down.

900. Imperial Pop. Cream of tartar, 3 ounces; ginger, 1 ounce; white sugar, 24 ounces; lemon juice, 1 ounce; boiling water, 1¼ gallons; when cool, strain, and ferment with 1 ounce of yeast, and bottle.

901. Girambing, or Limoniated Ginger Beer. Boil 4¼ ounces of ginger with 11 quarts water; beat up 4 eggs to a froth, and add them with 9 pounds sugar to the preceding. Take 9 lemons, peel them carefully, and add the rind and juice to the foregoing. Put the whole into a barrel, add 3 spoonfuls of yeast, bung down the barrel, and in about 1 days bottle it off. In 15 days it will be fit for drinking, but it improves by keeping.

902. Ginger Beer Powders. Fine powder of Jamaica ginger, 4 or 5 drachms; bicarbonate of soda, 3¼ ounces; refined sugar in powder, 14 ounces; essence of lemon, 30 drops; mix, and divide into 5 dozen powders. (Or 4 to 5 grains of ginger, 28 of bicarbonate of soda, 112 of sugar, and ¼ drop of essence of lemon, in each powder.) In the other powder put 32 grains of tartaric acid; or 3 grains if a more decidedly acidulated beverage is required. Or from 30 to 33 grains of citric acid.

903. Spruce Beer Powders. In each blue paper put 5 scruples of powdered sugar, 28 grains of bicarbonate of soda, and 10 grain essence of spruce. In each white paper 30 grains of tartaric acid.

904. Sherbet. Take 8 ounces carbonate of soda, 6 ounces tartaric acid, 2 pounds loa sugar (finely powdered), 3 drachms essence of lemon. Let the powders be very dry. Mi them intimately, and keep them for use in wide-mouthed bottle, closely corked. Put 2 good-sized tea spoonfuls into a tumbler; pou in ½ pint of cold water, stir briskly, and drin off.

905. Raspberry Shrub. 1 quart vinegar, 3 quarts ripe raspberries. After standing a day, strain it, adding to each pint a poun of sugar, and skim it clear, while boiling abou half an hour. Put a wine-glass of brandy t each pint of the shrub, when cool. Tw spoonfuls of this, mixed with a tumbler of water, is an excellent drink in warm weathe and in fevers.

906. Aerated or Effervescing Lemonade. This may be made by putting into eac bottle (soda water bottle) 1 ounce or 1 ounces syrup of lemons, and filling it up wit simple aerated water from the machin (The syrup is made by dissolving 30 ounce lump sugar in 16 ounces of fresh lemon juic by a gentle heat. It may be aromatized b adding 30 or 40 drops of essence of lemon t the sugar; or by rubbing part of the sug on the peel of 2 lemons; or by adding to th syrup an ounce of a strong tincture of fres lemon peel, or of the distilled spirit of th same.)

907. Effervescing Lemonade, without a Machine. Put into each bottle drachms of sugar, 2 drops of essence of lemon, ¼ drachm bicarbonate of potash, and water to fill the bottle; then drop in 35 or 4 grains of citric or tartaric acid in crystals, an cork immediately, placing the bottles in cool place, or preferably, in iced water.

908. Plain Lemonade in Powder. (For ten gallons.) ¼ pound tartaric acid i powder, 16 pounds sugar in powder, 1 drachms oil of lemons. Rub and mix well 1 ounce of this powder makes ¼ pint of lemonade.

909. To Make Superior Lemonade. Take the rind of 2 lemons, juice of 3 larg lemons, ½ pound loaf sugar, 1 quart boilin water. Rub some of the sugar, in lumps, o two of the lemons until they have imbibed al the oil from them, and put it with the remainder of the sugar into a jug; add the lemon juice (but no pips), and pour over the whole a quart boiling water. When the sugar i dissolved, strain the lemonade through a piece of muslin, and, when cool, it will be read for use. The lemonade will be much improved by having the white of an egg beate up with it.

910. To Make Orangeade. Take dilute sulphuric acid, concentrated infusion o orange peel, each 12 drachms; syrup of orange peel, 5 fluid ounces. This quantity added to 2 imperial gallons of water. A larg wine-glassful is taken for a draught, mixe with more or less water, according to taste This refreshing drink not only assuages th thirst, but has, moreover, strong antisept and anti-diarrhœa properties.

911. Imitation Lemon Juice. This an excellent substitute for lemon juice, keeps well in a cool place. Dissolve 1½ ounces citric acid, 45 grains carbonate of potassa, and 2½ ounces white sugar in 1 pint cold water; add the yellow peel of a lemon, and, in 24 hours, strain through muslin or a hair sieve. Instead of the lemon peel, 15 or 16 drops of oil of lemon may be used to flavor.

912. Imitation Lemon Juice. Citric or tartaric acid, 2½ ounces; gum, ½ ounce; pieces of fresh lemon peel, ¾ ounce; loaf sugar, 2 ounces; boiling water, 1 quart; macerate with occasional agitation till cold, and strain. Excellent.

913. Imitation Orange Juice. Dissolve 1 ounce citric acid and 1 drachm carbonate of potassa in 1 quart water, and digest in the solution the peel of half an orange until sufficiently flavored; then sweeten with honey or white sugar. Instead of the orange peel, 5 or 6 drops of oil of orange peel, with ½ fluid ounce tincture of orange peel, may be used.

914. To Keep Lemon Juice. Buy lemons when cheap and keep them in a cool place two or three days; roll them to make them squeeze easily. Squeeze the juice in a bowl, and strain it through muslin which will not permit a particle of the pulp to pass through. Have ready ½ and ¼ ounce phials, perfectly dry. Fill them with the juice so near the top as only to admit ½ tea-spoonful of sweet oil in each, or a little more if for larger bottles. Cork them tight, and put them in a cool dark place. When you want the juice, open such a sized bottle as you will use in a few days. Wind some clean cotton on a skewer, and dip it in, to absorb all the oil. When the oil is removed the juice will be as fine as when first bottled.

915. Portable Lemonade. Take 1 pound finely-powdered loaf sugar, 1 ounce tartaric or citric acid, and 20 drops essence of lemon. Mix, and keep very dry. 2 or 3 teaspoonfuls of this stirred briskly in a tumbler of water will make a very pleasant glass of lemonade. If effervescent lemonade be desired, 1 ounce carbonate of soda must be added to the above.

916. Lemonade Powders. Pound and mix together ½ pound loaf sugar, 1 ounce carbonate of soda, and 3 drops oil of lemon. Divide the mixture into 16 portions, wrapped in white paper. Then take 1 ounce of tartaric acid, and divide into 16 portions, wrapping them in blue paper. Dissolve one of each kind in half a tumbler of water, mix the two solutions together, and drink while effervescing.

917. Lemon Soda Nectar. Juice of 1 lemon, ¾ tumblerful of water, powdered white sugar to taste, ½ small tea-spoonful of carbonate of soda. Strain the juice of the lemon, and add to it the water, with sufficient white sugar to sweeten the whole nicely. When well mixed, put in the soda, stir well, and drink while in an effervescing state.

918. Milk Punch. Take 1 table-spoonful white sugar, 2 table-spooonfuls water, 1 wine-glass cognac brandy, ½ wine-glass Santa Cruz rum, ⅓ tumblerful shaved ice. Fill with milk, shake the ingredients well together, and grate a little nutmeg on top.

919. Brandy Punch. Take 1 table-spoonful raspberry syrup, 2 table-spoonfuls white sugar, 1 wine-glass water, 1½ wine-glass brandy, ½ small sized lemon, 2 slices of orange, 1 piece of pineapple. Fill the tumbler with shaved ice, shake well, and dress the top with berries in season; sip through a straw.

920. Whiskey Punch. Take 1 wine-glass whiskey (Irish or Scotch), 2 wine-glasses boiling water, sugar to taste. Dissolve the sugar well with 1 wine-glass of the water, then pour in the whiskey, and add the balance of the water, sweeten to taste, and put in a small piece of lemon rind, or a thin slice of lemon.

921. Claret Punch. Take 1½ table-spoonfuls of sugar, 1 slice of lemon, 2 or 3 slices of orange. Fill the tumbler with shaved ice, and then pour in the claret, shake well, and ornament with berries in season. Place a straw in the glass.

922. Sherry Cobbler. Take 2 wine-glasses of sherry, 1 table-spoonful of sugar, 2 or 3 slices of orange. Fill a tumbler with shaved ice, shake well, and ornament with berries in season.

923. Egg Nogg. Take 1 table-spoonful of fine sugar, dissolved with 1 table-spoonful cold water; 1 egg, 1 wine-glass Cognac brandy, ½ wine-glass Santa Cruz rum, ⅓ tumblerful of milk. Fill the tumbler ¼ full with shaved ice, shake the ingredients until they are thoroughly mixed together, and grate a little nutmeg on top.

924. Bottle Cocktail. To make a delicious bottle of brandy cocktail, use the following ingredients: ⅔ brandy, ⅓ water, 1 pony-glass of Bogart's bitters, 1 wine-glass of gum syrup, ½ pony-glass of Curaçoa. Whiskey and gin cocktails, in bottles, may be made by using the above receipt, and substituting those liquors instead of brandy.

925. Brandy Smash. ½ table-spoonful of white sugar, 1 table-spoonful water, 1 wine-glass of brandy. Fill ⅔ full of shaved ice, use two sprigs of mint, the same as in the receipt for mint julep. Lay two small pieces of orange on top, and ornament with berries in season.

926. Santa Cruz Sour. 1 table-spoonful fine sugar, 1 wine-glass Santa Cruz rum, juice of ½ a lemon. Put the ingredients in a small tumbler ⅔ full of shaved ice, stir, and strain into a claret glass, and dress with thin slices of lime or lemon, and fruit in season.

927. Mulled Wine with Eggs. 1 quart of wine, 1 pint of water, 1 table-spoonful of allspice, and nutmeg to taste; boil them together a few minutes; beat up 6 eggs with sugar to your taste; pour the boiling wine on the eggs, stirring it all the time. Be careful not to pour the eggs into the wine, or they will curdle.

928. Regent Punch. 14 each lemons and oranges, the rinds only, 18¾ drachms ground cinnamon, ¾ drachm ground cloves, 2 drachms ground vanilla. Cut, macerate for 24 hours with 2 gallons pure Cognac, and 2 gallons pure Jamaica rum. Strain, press, and add 12 pounds of sugar, boiled with 6 gallons water; skim, and add to the syrup 2 ounces green tea; let it cool, and add the juice of 60 lemons and 14 oranges. Filter through Canton flannel.

929. Bottle Wax. Shellac, 2 pounds; resin, 4 pounds; Venice turpentine, 1½ pounds; red lead, 1½ pounds. Fuse the shellac and resin cautiously in a bright copper pan, over a clear charcoal fire. When melted add the turpentine, and lastly, mix in the red lead. Pour into moulds, or form sticks of the desired size on a warm marble plate. The gloss may be produced by polishing the sticks with a rag until they are cold.

930. Corking. Little can be said with regard to the corking of bottles, beyond stating the fact that common, cheap corks, are always dear; the best corks are soft, velvety, and free from large pores; if squeezed they become more elastic and fit more closely. If good corks are used, of sufficiently large size to be extracted without the corkscrew, they may be employed many times in succession, especially if they are soaked in boiling water, which restores them to their original shape, and renews their elasticity. The most common mode of fastening down corks is with the gingerbeer knot, which is thus made. First the loop is formed as in Fig. 1, then that part of the string which passes across the loop is placed on the top of the cork, and the loop itself passed down around the neck of the bottle, and by pulling the ends of the cord is made tight beneath the rim; the ends of the string are finally brought up, and tied either in a double knot or in a bow on the top of the cork. When ginger-beer is made at home it will be found most advantageous to use the best corks, and to tie them down with a bow, when both corks and strings may be made use of repeatedly. For effervescent wines, such as champagne, gooseberry, &c., which require to be kept a longer time, and are more valuable, a securer knot is desirable, which may be made thus: A loop, as in Fig. 2, is first formed, and the lower end is then turned upwards and carried behind the loop as shown in Fig. 3; it is then pulled through the loop as in Fig. 4, and in this state is put over the neck of the bottle; the part *a* being on one side, and the two parts of the loop on the other; on pulling the two ends the whole becomes tight round the neck, and the ends, which should be quite opposite, are to be brought up over the cork, twice twisted, as in Fig. 5, and then tied in a single knot.

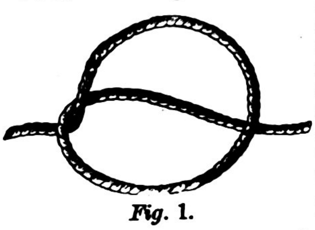


Fig. 1.

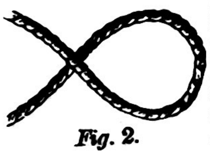


Fig. 2.

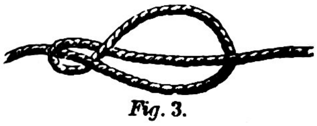


Fig. 3.

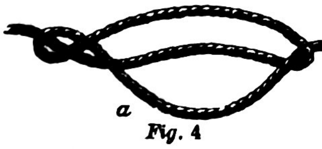
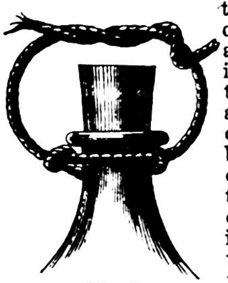


Fig. 4


Fig, 5.

931. Distillation of Whiskey and New England Rum. The process of distillation commences with the fermentation of grain or molasses by the presence of yeast, and this is called mashing, or preparing the mash. Strictly speaking, indeed, the spirits are not produced by distillation: that is done by the previous step of fermentation, and distillation merely separates the spirits from the mixture in which they already exist. The object of fermentation is to convert the starchy principle of the grain into sugar, or to saccharify it. After being agitated for 2 or 3 hours, the saccharine infusion, called wort, is drawn off from the grains and cooled. To this wort is now added a certain quantity of yeast or leaven, which induces the vinous fermentation, and resolves the saccharine matter into alcohol and carbonic acid, accompanied by a rise of temperature. The alcoholic mixture which results is called the wash, and is now ready for distillation.

932. How to Prepare Yeast for Rye Whiskey or New England Rum. To prepare yeast for 80 gallons mash, take 2 pounds of wheat meal and dilute it with sufficient warm water to make a thin paste. Then boil 2 ounces of hops in a quart of water, and when cold take out the hops and throw them away. Then dilute 1 quart of malt in a quart of water. Mix, cold, the hop water, paste and malt well together, and add half a pound of leaven. Cover the jar containing the mixture with a piece of cloth, and keep it 3 or 4 hours in some warm place until it rises. The fermentation will be perfect after the whole has arisen and then sunk down. Then add 2 gallons of the mash, stir the whole, mix it with 80 gallons of the mash, and begin the fermentation. This receipt is the very best for rye whiskey.

933. To Prepare Yeast for New England Rum. To 80 gallons mash, add 1 gallon brewers' yeast and ½ pound carbonate of ammonia dissolved in a pint of water. Stir well, and begin the fermentation. Good for New England rum.

934. To Prepare Yeast for Rye Whiskey. To 80 gallons of mash, add 1 gallon yeast, 5 quarts of malt, and 1 pound of molasses. Dilute the malt with 2 quarts of water, and add the molasses. Keep the whole in a warm place until it rises, as described in No. 931. Add the yeast to the mash and stir; afterwards add the molasses and malt and stir again. Then begin the fermentation. Good for rye whiskey.

935. How to Prepare Mash for New England Rum. For a still by steam or fire. To prepare 80 gallons mash, reduce the molasses 18 degrees by the saccharometer, add yeast No. 932, and stir well. Let it ferment at a temperature of 75° Fahrenheit, until the mash is reduced to 0. But as it is very difficult to get such a reduction, the operator may begin to distill when the mash marks 2 or 3 degrees by the saccharometer. Charge three-fourths of the still, and begin distilling.

936. How to Prepare Mash for Rye Whiskey. For a still by steam or fire. To prepare 80 gallons mash, grind the rye into coarse powder, then charge the fermenting tubs in the proportion of 110 pounds of rye to 80 gallons of water, and mix yeast No. 931 or 933. Let it ferment at a temperature of 75° or 80° Fahr., until the fermentation is completed. The fermentation will be perfect after the mash rises and sinks. When this is done, charge three-fourths of the still and begin distilling. In preparing the mash, the operator may use all rye, as directed above—this makes the best quality of whiskey—or use three-fifths rye and two-fifths corn, or three-fifths corn and two-fifths rye.

937. Distillation with or without a Heater. Distillers usually employ a heater to hasten the process of distillation. When the heater is employed, the mash passes from the fermenting tubs into the heater. During the time occupied in distilling over the charge of the still, it is necessary to keep a heat of 125 degrees in the heater. The mash passes directly from the heater into the still by means of a pipe or gutter, according to the general arrangement of the apparatus. Distill until the spirit which runs from the worm marks 10 degrees below proof. This first run is called high wine. Then remove the receiver that contains the high wine, and substitute another. Continue to distill until the low wine ceases to blaze when it is thrown in the fire. Whenever this occurs, stop the operation, and keep the low wine for the next distillation. Then clean the still and charge with fresh mash. When the operator do not employ the heater, the mash passes fr the fermenting tubs immediately into the sti No uniform disposition is necessary for th fermenting tubs or heater; all depends upo the general arrangement of the apparatu The distiller need not be informed that th apparatus must be arranged so as to save la bor. If the mash tubs are above the sti connect them by a gutter or pipe; if on a lev el with the still, employ a hand pump.

938. How to Pack a Rectifying Tu To rectify from 10 below proof to 50 abov proof. 30 bushels of maple charcoal are re quired for a tub seven feet high and four fee in diameter; a tub of this size will give clear bed of 14 inches. At two inches fro the bottom of the tub place a false botto perforated with ½-inch holes, and cover th bottom with sailcloth or blanket. Then pac in the charcoal regularly and very tight with a wooden pestle. Great attention shou be given to this part of the operation, in or der to prevent the occurrence of holes crevices in the charcoal during the process filtration. Pack the sides of the tub thor oughly. Cover the charcoal with sailclot place laths over the cloth, and use heav stones to keep the charcoal down.

TECHNO-CHEMICAL RECEIPT BOOK

BITTERS, CORDIALS, ELIXIRS, LIQUEURS, RATAFIAS AND ESSENCES; EXTRACTS, TINCTURES AND WATERS USED IN THEIR MANUFACTURE, AND THE MANNER OF COLORING THEM.

(*Index on Page 174*)

Most of the bitters, cordials, liqueurs, etc., are produced in the cold way, either by mixing a solution of oil in alcohol with a warm solution of sugar in water, or by adding to this solution tinctures or essences, and diluting the mixture with the quantity of water required. As every cordial or liqueur appears turbid after mixing it, clarification becomes necessary. For ordinary qualities a solution of one-half ounce of alum in a pint of water for every 20 gallons of cordial can be recommended, and if this has not the desired effect, a solution of one ounce of soda in a pint of water may be added to the same quantity of cordial. But for the finer brands it is better to use a solution of 4 ounces of isinglass to a pint of water.

Mode of Coloring Cordials, Liqueurs, etc. Cordials and liqueurs should be colored after they have been filtered. A large number of cordials are not colored, especially anisette, bergamot, calamus, cardamon, caraway, fennel and maraschino.

Coffee, chocolate, curaçoa, nut, and most bitters are colored brown.

Barbadoes and orange blossoms cordials, dark yellow or orange.

Anise, lemon, orange and peach, pale yellow.

The cordials prepared from fresh herbs, green.

Cherry, gold water, raspberry, strawberry, rose and nutmeg, red. We have added the color required to most of our receipts.

I. COLORING SUBSTANCES. *Blue.* Dissolve ½ ounce of finely powdered indigo in 2 ounces of sulphuric acid, and add 6 ounces of water to the solution.

Green. I. Boil 2 parts of liquid wash blue, 1 of powdered turmeric; add some alum to the mixture and filter it.

II. To obtain a fine green, mix the tinctures of yellow and blue as given under their respective headings.

Purple. Boil archil in water, and add some alum.

Red. I. Crush ½ ounce of cochineal and 15 grains of alum; pour over the powder 8 ounces of boiling water and filter the fluid. The color is made darker or lighter according to the quantity of cochineal used.

II. Macerate 1 lb. of bilberries in 2 quarts of alcohol for 2 days, press the mass through a linen cloth and filter the fluid.

III. Macerate 3 ounces of finely powdered cochineal in 3 pints of alcohol for 2 days, then add ¼ ounce of powdered alum, and filter the fluid.

Yellow. I. Macerate 1 ounce of genuine saffron in 3 pints of alcohol, and then filter the fluid.

II. Take a quantity of marigolds according to the shade of color to be produced, steep them in alcohol, and filter the fluid, when it has assumed the desired shade of color.

II. ESSENCES, EXTRACTS, TINCTURES AND WATERS. *Absinthe Tincture.* Dissolve 2 fluid drachms of oil of wormwood, 1½ fluid drachms of oil of badian seed, 1¼ fluid drachms each of oil of anise seed, oil of fennel and oil of coriander seed; ¾ fluid drachm each oil of Crete marjoram (origan) and of oil of angelica, and 20 drops of oil of cardamon, 2 gallons of rectified spirits of 90 per cent. Tr.; dilute the solution with 2½ quarts of water, and color it green.

Ambergris Essence. Pour 12 fluid ounces of spirit of wine of 90 per cent. Tr. over 1 ounce of coarsely powdered ambergris, and let it stand for a few days. Then draw off the liquid, extract the residue with spirit of wine, filter the extract, and add it to the other portion.

Angelica Essence. Mix by shaking ½ fluid ounce of pure angelica oil with 1 quart of alcohol of 90 per cent. Tr.

Anise-seed Essence. Distil 1 pound of crushed anise seed, 1½ gallons of strong rectified spirit, and ½ pint of water. Add to this ¾ fluid ounce of anise seed oil and ½ gallon of rectified spirit, and clarify the mixture with 1 ounce of alum.

Anise-seed Extract. Dissolve by shaking 40 drops of anise seed oil, 4 drops of fennel oil, and 2 drops of coriander seed oil in 3 pints of rectified spirit of 90 per cent. Tr.

Anise-seed Tincture. Dissolve 2 fluid drachms of anise seed oil and 1½ fluid drachms of badian seed oil in 2 gallons of rectified spirit of 90 per cent. Tr.; dilute the solution with ½ gallon of water, and color it green, as above.

Aromatic Tincture. Comminute 6 ounces of zedvary, 4 ounces each of calamus root, galanga and angelica root, 2½ ounces of bay leaves, 2 ounces each of cloves, cinnamon blossoms and scraped orange peel, 3 ounces of Roman camomile, ½ ounce of ginger, and ½ ounce of mace. Pour 1¾ gallons of rectified spirit of 90 per cent. Tr. over the ingredients, and let them macerate for 8 days, then filter, and add 40 drops of oil of peppermint and 2½ quarts of water.

Barbadoes Essence. Mix 25 drops of oil of lemon, 25 of oil of bergamot, 6 each of oil of cinnamon, oil of cloves and oil of nutmeg, with 1 gallon of rectified spirit of 90 per cent. Tr., shake the mixture thoroughly, and filter it.

Bergamot Essence. Dissolve ¼ fluid ounce of oil of bergamot in ⅓ gallon of spirit of wine of 90 per cent. Tr.

Bitter Almond Essence. Crush 9 ounces of bitter almonds, place them into a still with 2½ gallons of water, let them macerate for 12 hours; then add 2¾ gallons of spirit of wine of 90 per cent. Tr., and distil off a distillate 75 per cent. strong.

Or, Pour 3½ quarts of strong rye whiskey over 1 pound of crushed apricot kernels, 4 ounces of cherry kernels, 1 fluid drachm of cloves, and ½ fluid drachm of mace, and distil off 3 quarts of essence of bitter almonds, or kernel extract.

Or, Dissolve 1 fluid drachm of oil of bitter almonds in 3 quarts of rectified spirit of 90 per cent. Tr., and store the fluid for some time before using it.

Bitter Essence (*Single*). Macerate ½ ounce of dried orange peel, ¼ ounce of calamus root cut in small pieces in 1¼ quarts of spirit of wine of 90 per cent. Tr. Let the mass stand for 2 days and then filter it.

Bitter Essence (*Double*). Comminute 2½ ounces of leaves of common buck bean, 1⅓ ounces each of germander water, dried orange peel, and leaves of wormwood, and ½ ounce each of cinnamon and gentian root. Pour 1⅛ gallons of rectified spirit of 90 per cent. Tr. over the ingredients and let them digest for 2 days, when the fluid is drawn off and filtered.

Bitter Extract for Grünewald Bitters. Comminute 2 ounces of orange peel, ½ ounce each of gentian root, leaves of common buck bean, and galanga, ¼ ounce of leaves of blessed thistle, and 1 drachm of leaves of wormwood. Put the ingredients in a suitable flask, pour 1¼ gallons of spirit of wine 90 per cent. strong over them, place them in a warm place and let them digest. Then draw off the fluid, press out the residue, add the extract to the first fluid, and filter it through porous paper.

Calamus Tincture. Dissolve 1 fluid ounce of oil of calamus in 2 quarts of rectified spirit of 90 per cent. Tr.

Or, Comminute 15 ounces of calamus root and 1 ounce of angelica root. Pour 5 gallons of whiskey, 45 per cent. strong, over the roots, let them macerate for 2 days, and then distil off 3 gallons of essence 75 per cent. strong.

Caraway Essence (*Cumin Essence*). Pour 5 gallons of spirits of wine, 50 per cent. strong, over:

Crushed caraway seed	2 lbs.
Crushed anise seed	1 oz
Crushed fennel seed	1 oz.
Orris root cut in pieces	1½ oz.
Powdered cinnamon	½ oz.

Let the mass digest for 24 hours, and then distil off a distillate 85 per cent. strong.

Cardamon Extract. Peel and comminute 4¼ ounces of cardamons, pour 2½ pints of rectified spirit of 90 per cent. Tr. over them, add and mix thoroughly with it 1½ fluid drachms of oil of cardamon, and let the entire mass digest for 2 days, when the fluid is drawn off and filtered.

Or, Mix 1½ fluid drachms of oil of cardamon with 1¼ quarts of rectified spirit of 90 per cent. Tr. and filter the fluid through porous paper.

Cherry Extract. Press out the flesh of ripe cherries, let the mass stand quietly in a moderately warm room until the pure juice has separated from the pulp. Then place the mass in a bag, press the juice out, let it stand for a few hours longer, and add an equal quantity of rectified spirit of 90 per cent. Tr.

Cherry Water. Distil 5½ pounds of crushed cherry stones with 7¾ gallons of water, add 4½ to 5 gallons of cherries, and distil off 3 to 4½ gallons of cherry water.

Chocolate Essence. Pour 2½ quarts of spirit of wine over 12¾ ounces of roasted and ground cocoa beans, ½ ounce of powdered cinnamon, and ¼ ounce of powdered cloves; let the ingredients digest and filter the fluid.

Cinnamon Essence. Dissolve ½ fluid ounce of oil of cinnamon in 1¼ quarts of rectified spirit of 85 per cent. Tr., and filter the solution.

Clove Essence. Comminute 9 ounces of cloves, pour 1¼ quarts of rectified spirit of 90 per cent. Tr. over them, let them digest for a few days, and then filter the fluid.

Coffee Essence. Pour 1½ quarts of rectified spirit of 90 per cent. Tr. over 5¼ ounces of finely-roasted and ground coffee, let it digest for some time, draw off the fluid and filter it.

Cognac Essence. Dissolve 3½ fluid ounces of sulphuric ether in ⅛ gallon of alcohol of 90 per cent. Tr.

English Bitters Essence. Comminute ¾ ounce each of leaves of wormwood, leaves of centaury, and leaves of blessed thistle; ½ ounce each of gentian root, china root, and orange peel; ⅓ ounce of orris root, and 1 ounce of grains of Paradise. Pour 1¼ quarts of rectified spirit of 90 per cent. Tr. over these ingredients, let them digest for some time, then pour the fluid off and filter it.

Fennel Essence. Dissolve 1 fluid drachm of oil of fennel, ¼ drachm each of anise seed oil and oil of lemon, and 10 drops of cumin oil in 1½ quarts of rectified spirit of 90 per cent. Tr.

Gold Water Essence. Dissolve 4 fluid drachms of oil of lemon, 2 fluid drachms of oil of orange, 1 fluid drachm each of rose oil, oil of nutmeg, and oil of cinnamon, ½ fluid drachm each of oil of calamus, oil of lavender, and oil of juniper, and ¼ fluid drachm of oil of cloves in ½ gallon of rectified spirit of 90 per cent. Tr., and filter the solution.

Herb Cordial Essence. Comminute ¾ ounce each of orange peel and lemon peel, ½ ounce of calamus root, ¼ ounce each of juniper berries, ginger, orris root, angelica root, and coriander seed, and 1 ounce each of galanga, leaves of marjoram, and leaves of rosemary. Pour 1 gallon of rectified spirit of 90 per cent. Tr. over these ingredients, let them digest for some time, then press out the fluid and filter it.

Juniper Berry Essence. Dissolve 1 to 1¼ fluid ounces of oil of juniper in 1¼ quarts of rectified spirit of 90 per cent. Tr. and filter the solution.

Or, Distil 1½ pounds of crushed juniper berries, 1½ ounces of bruised anise seed, and 3 ounces of powdered cinnamon, with whiskey sufficient to give a distillate of 3 gallons 75 per cent. strong.

Lavender Essence. Dissolve ½ fluid ounce of oil of lavender in 3½ quarts of rectified spirit of 90 per cent. Tr., and filter the solution.

Lemon Essence. Dissolve 2 fluid drachms of oil of lemon in 1⅓ quarts of rectified spirit of 85 per cent. Tr., and shake the solution thoroughly.

Mace Extract. Pour 3½ quarts of rectified spirit of 90 per cent. Tr. over 2 ounces of mace, let it digest for a few days, and then filter the fluid.

Marjoram Essence. Dissolve ½ ounce of oil of marjoram in 3½ quarts of rectified spirit of 90 per cent. Tr., and filter the solution.

Musk Essence. Pour 1¼ pints of rectified spirit of 90 per cent. Tr. over 1 drachm of powdered musk and ½ drachm of pulverized gray ambergris. Let the ingredients macerate for a few days and then draw off the clear fluid. Extract the residue with spirit of wine, filter the extract and add it to the first portion.

Nut Essence. Crush 50 large green walnuts, pour 1¼ gallons of rectified spirit of 90 per cent. Tr. over them, let them digest for a few days and press out the fluid. Distil the residue with sufficient whiskey to give a distillate 80 per cent. strong, and add this to the first essence.

Nutmeg Essence. Comminute 8¾ ounces of nutmegs, pour 6 gallons of rectified spirit of 90 per cent. Tr. over them, let them digest for a few days and then filter the fluid.

Orange Blossom Extract. Pour 1¼ pints of boiling milk over 10½ ounces of fresh orange blossoms; place the same on the fire and let it boil up; then add and thoroughly mix with it 3 quarts of rectified spirit of 90 per cent. Tr., and add 1¼ quarts of champagne to the filtrate.

Orange Blossom Water. Distil 11 pounds of preserved orange blossoms in 6 gallons of water, so that the distillate will amount to 3 to 3½ gallons of aromatic water.

Orange blossoms are preserved in the following manner: Put a handful of salt on the bottom of an earthen jar, place upon this a layer of orange blossoms, and repeat this alternately until the jar is filled. By keeping the jar in a cool place the orange blossoms will remain fresh for a long time. *Rose leaves* are preserved in the same manner.

Orange Juice. Mix the juice of 12 or more oranges with 12 fluid ounces of rectified spirit of 90 per cent. Tr. When the sediment has all settled to the bottom, draw the fluid off and filter it.

Orange Peel Extract. Crush in a stone mortar the rinds of 12 oranges with some sugar, and let the mass digest for a few days by placing it in ⅓ gallon of rectified spirit of 90 per cent. Tr. Then decant the clear fluid and filter it.

Parfait D'Amour Essence. Dissolve ½ fluid ounce of oil of cinnamon, 6 fluid drachms each of oil of cardamon, oil of rosemary, and anise seed oil, and 20 minims each of oil of lemon, oil of orange, oil of cloves, oil of camomile, and oil of lavender in 1¼ quarts of rectified spirit of 90 per cent. Tr. Shake the solution thoroughly and filter it.

Peach Essence. Dissolve 1 fluid

drachm of oil of bitter almonds in 3½ quarts of rectified spirit of 90 per cent. Tr., allow the solution to stand for a few days, and then filter it.

Or, Crush 8¾ ounces bitter almonds, put them in a still, pour 2½ gallons of water over them, and let them digest for 12 hours. Then add 2¾ gallons of spirit of wine, and distil off a distillate 75 per cent. strong.

Peppermint Essence. Dissolve ¾ to 1 ounce of oil of peppermint in 2½ quarts of rectified spirit of 90 per cent. Tr.

Peppermint Essence may also be prepared by steeping 1 part of the leaves of the plant in 3 of spirit of wine 90 per cent. strong. After remaining in the spirit for 5 or 6 days, the clear fluid is poured off, the residue pressed, and the extract filtered and added to the clear fluid.

Quince Essence. Grate the quinces, press the juice out, add equal parts by weight of rectified spirit of 85 per cent. Tr.; let the mass stand until it settles and then filter.

Raspberry Extract. Crush 2 pounds of ripe raspberries, press them out and add 2 quarts of rectified spirit of 90 per cent. Tr.

Or, Take freshly picked raspberries, place them in an earthen dish, crush them to a pulp with a wooden spoon, and let this stand quietly in a moderately warm room until the pure juice has separated. Then place the pulp in a bag, press it out, let the juice stand for a few hours longer, and add the same quantity of rectified spirit of 90 per cent. Tr.

Raspberry Water. This is prepared from the residue left in preparing the extract by stirring it into a mash with water and distilling.

Rose Essence. Dissolve 2 fluid drachms of rose oil in 1⅓ quarts of rectified spirit of 90 per cent. Tr., and filter the solution.

Rose Water. Preserved rose leaves are distilled in the same manner as given under *Orange Blossom Water.*

Rosemary Essence. Mix 6 fluid drachms of oil of rosemary with 1¼ quarts of rectified spirit of 90 per cent. Tr.; let the mixture stand for a few days and then filter it.

Sage Essence. Dissolve 1 fluid ounce of oil of garden sage in 1¾ pints of rectified spirit of 85 per cent. Tr.

Spanish Bitters Essence. Comminute 6 parts of calamus root, 3½ each of centaury and polypody root, 3 of orris root, 2 each of galanga, leaves of blessed thistle, elecampane root, and gentian root, and 1 each of leaves of wormwood, angelica root, and masterwort root. Pour 400 parts of rectified spirit, 90 per cent. strong, over the ingredients, let them digest for 48 hours, then press the fluid out and filter it.

Strawberry Extract. Bruise 4½ pounds of wild strawberries; pour 3 quarts of spirit of 90 per cent. Tr. over the mass; let it stand for some time and filter. The product will be about 1 gallon of strawberry essence.

Strengthening Tincture. Comminute 4¼ ounces each of gentian root, calamus root, and oak bark, 2 ounces each of orange peel and angelica root, 1 ounce of cinnamon, and ½ ounce each of cloves and ginger. Pour 1⅓ gallons of rectified spirit of 90 per cent. Tr., and 1¾ quarts of water over the ingredients, and let them digest for eight days. Then filter the mass, add 40 minims of oil of wormwood, and a like quantity of oil of peppermint and oil of balm to the filtrate.

Vanilla Essence. Cut 2½ ounces of vanilla beans, pour 1¼ quarts of rectified spirit of 90 per cent. Tr. over them; let them digest for some time, and filter the fluid. This essence should be kept in hermetically closed flasks.

Vanilla water may be made by pouring 1 gallon of water over the extracted residue.

Vanilla Tincture. Macerate ⅓ ounce of vanilla beans for 8 days in 2 fluid ounces of rectified spirit of 90 per cent. Tr., and filter the fluid.

Wormwood Essence. Comminute ¾ ounce each of leaves of wormwood, leaves of centaury, and leaves of blessed thistle, ½ ounce each of gentian root, china root, and orange peel, ⅓ ounce of orris root, and 1 ounce of grains of Paradise. Pour 2½ pints of rectified spirit of 90 per cent. Tr. over the ingredients, let them digest for some time, and filter the fluid off.

III. ELIXIRS. *Abbé Elixir.* Comminute 3⅓ pounds of lemon peel, 6¼ ounces of nutmeg, and a like quantity of cloves. Place the ingredients in a wickered demijohn, and pour 20 gallons of 33 per cent. alcohol over them, and let them digest for 3 to 4 weeks, placing the demijohn in a warm place.

The mass is then strained through a cloth, the residue pressed out, the fluid filtered, and the filtrate compounded with a sufficient quantity of white sugar syrup.

Angel Elixir. Comminute and mix 4½ ounces of cinnamon, 2 ounces of galanga, 1½ ounces of cloves, 1 ounce each of nutmeg, orange peel, and lemon peel, ¾ ounce of ginger, ½ ounce each of orris root, zedvary, cubebs, and cardamons. Pour 3 pints of alcohol over the ingredients, and let them digest for 8 days. Then filter and add 2½ gallons of double distilled rose water, and 13 pounds of sugar syrup.

Elixir de St. Aur. Distil 9 ounces each of lavender blossoms, orange peel and rose leaves, 5½ ounces of lemon peel, 1 ounce each of cinnamon, cloves and nutmegs, with 5 gallons of alcohol and 4 gallons of water. Add 2½ quarts each of rose water, orange blossom water, balm water, and cinnamon water, and 30 pounds of sugar syrup to the distillate, and color it rose-red.

Elixir-Colombat. Dissolve 120 drops of oil of juniper, 40 each of oil of angelica, oil of wormwood, and oil lemon, and 20 of oil of cinnamon in 1½ gallons of alcohol; add 2¾ pounds of sugar dissolved in 1¼ gallons of water to the solution, and color it pale red.

Elixir of Life. Dissolve 2 fluid ounces of oil of wormwood and 1 fluid ounce each of oil of cardamon, oil of calamus, oil of nutmeg, and oil of orange peel, in 3½ gallons of alcohol 90 per cent. strong, and add ¾ of a gallon of water to the solution. Color the fluid brown with burned sugar.

Elixir Monpou. Dissolve 120 drops of oil of peppermint, 40 each of oil of balm, oil of orange peel, rose essence, and orange blossom essence; 32 each of oil of mace and oil of cloves, and 60 of vanilla tincture, in 1½ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with a syrup made of 7 pounds of sugar and 1¼ gallons of water. Color it rose-red.

Elixir des Troubadours. Macerate 2 pounds of musk roses, 1½ pounds of jasmine blossoms, 9 ounces of orange blossoms, 2½ drachms of mace in 3½ gallons of whiskey, 22 per cent. strong. Let the mass stand for 14 days; distil on the water bath, and add a syrup made of 11 pounds of sugar and 3 quarts of water. Color rose-red.

Elixir Vital. Dissolve 120 drops of oil of bergamot, 32 each of oil of mace, oil of coriander seed, and oil of cloves; 24 each of cumin oil and oil of cinnamon, and 60 of vanilla tincture in 1½ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with a syrup made of 6½ pounds of sugar and 1½ gallons of water. Color green.

Juniper Elixir. Crush 4¼ ounces of juniper berries, pour 1 gallon of spirit 22 per cent. strong over them, and let them digest for 4 weeks. Then strain the fluid off, and add a syrup made of 9 pounds of sugar and 1½ quarts of water.

Tabourey Elixir. Comminute ½ ounce of aloes, 2 ounces each of cinnamon and walnuts, 4¼ ounces each of orange peel and lemon peel, and 1 ounce of cloves. Pour 2¾ gallons of spirit of wine 33 per cent. strong over the ingredients, and let them digest for some time; then distil in a water bath, and add a syrup made of 13 pounds of pulverized sugar, and 1¾ quarts each of orange blossom water and rose water. This elixir is colored rose-red.

IV. BITTERS, CORDIALS, LIQUEURS AND RATAFIAS. *Anise-seed Cordial.* Dissolve 2 fluid drachms of anise-seed oil and 20 drops of badian seed oil in 1⅓ gallons of alcohol of 90 per cent. Tr. Compound this solution with 6½ pounds of sugar in 1½ gallons of water, and filter.

Another Recipe. Dissolve 2 fluid drachms of anise seed oil, 40 drops of fennel oil, 32 drops of cummin oil, and 30 drops of oil of lemon, in 2¾ gallons of spirit of wine. Mix with this a solution of 8¾ pounds of sugar in 2¼ gallons of water, and store it away for 3 to 4 weeks. Then draw off the clear fluid, filter the sediment and color yellow.

Anisette Cordial. Dissolve 2 fluid drachms of anise seed oil and 18 drops of oil of bitter almonds in 1½ gallons of alcohol of 90 per cent. Tr.; add a solution of 5½ pounds of sugar in 1⅓ gallons of water, and filter.

French Anisette. Dissolve 2 fluid drachms of anise oil, 20 drops of oil of bitter almonds, and 2½ fluid ounces of cognac essence (see Essences) in 1½ gallons of alcohol of 90 per cent. Tr. Mix this solution with one of 5½ pounds of sugar in 1⅓ gallons of water, and filter.

Holland Anisette. Dissolve 1 fluid drachm of anise oil, ½ fluid drachm of cognac essence, ¼ fluid drachm each of badian seed oil, oil of bitter almonds, and vanilla essence (see Essences), 1½ gallons of alcohol of 90 per cent. Tr. Mix the solution with one of 6 pounds of sugar in 1⅓ gallons of water, and filter.

Angelica Cordial. Macerate the following ingredients in 4 gallons of alcohol of 90 per cent. Tr., and expose them to a moderate heat for 4 days:

Lemon peel	8½	ounces.
Orange peel	5¼	"
Mace	½	"
Nutmeg	⅓	"
Cassia	2¼	"
Cloves	2	"
Orris root	1	"
Rosemary leaves	2	"
Lavender flowers	1¾	"
Marjoram	¾	"
Orange flowers	2¼	"
Vanilla	⅓	"
Crushed juniper berries	2¼	"

Filter the mixture and compound the filtrate with a solution of 26 pounds of sugar in 2¾ gallons of water.

Aqua Bianca. Dissolve 30 drops of oil of lemon, 27 drops of cedar oil, 33 drops of oil of balm, 30 drops of oil of peppermint, ½ fluid drachm of vanilla essence, and ½ fluid drachm of ambergris essence (see Essences), in 1½ gallons of alcohol of 90 per cent. Tr. Compound the fluid with a solution of 6½ pounds of sugar in 1⅓ gallons of water, and filter.

Aqua Reale. Dissolve 1 fluid drachm of oil of lemon, ¾ fluid drachm of oil of orange peel, 27 drops of oil of cinnamon, 30 drops of oil of cloves, 30 drops of oil of mace, 2 fluid drachms of vanilla essence, and ¾ fluid drachm of ambergris essence. Add to this solution one of 6½ pounds of sugar in 1 gallon of water, and filter.

Aqua-Turco Liqueur. Pour 2½ quarts of boiling water over 4¼ ounces of imperial tea, ½ ounce of green tea, 1 ounce of black gunpowder tea, 1½ ounces of strong infusion of lime blossoms, and ½ ounce of angelica seed. Close the vessel tightly to prevent the vapors from escaping, until the infusion has become cold. Then draw off the clear fluid and pour 2½ quarts of boiling water over the residue. Filter this infusion when cold and add it to the first infusion. Then add 28½ pounds of sugar and 2¼ gallons of rectified spirit of wine. Clarify the fluid with the whites of 3 eggs and 1¾ pints of sweet cream, and perfume it with some musk and spirit of ambergris. Finally, add 8½ fluid ounces of vanilla essence and let the fluid rest quietly for 24 hours. Then filter the liquor through a bag filled with animal or wood charcoal in order to obtain it entirely colorless.

Aromatic Cordial. Mix 30 drops of oil of lemon, 24 of oil of rosemary, 27 of oil of lavender, 30 of oil of peppermint, 27 of oil of angelica, 27 of oil of marjoram, and 33 of oil of cardamon with 1½ gallons of alcohol of 90 per cent. Tr. Shake thoroughly and then compound the solution with one of 5½ pounds of sugar in 1⅓ gallons of water, and filter.

Ambergris Water. Macerate 2 drachms of powdered gray ambergris, 30 grains of powdered musk, 80 grains of civet in 1¼ pints of spirit of wine 40 per cent. strong, add ½ ounce of refined sugar. Let the mixture stand for 14 days and then filter.

Berlin Bitters. Dissolve 80 drops of oil of juniper, 80 of oil of coriander, 40 each of oil of angelica and badian seed oil, and 44 drops of oil of ginger in 1½ gallons of alcohol of 80 per cent. Tr. To this solution add 1½ gallons of water and 1 pound of sugar. Filter and color brown.

Bitter-Rossoli. Comminute 8½ ounces of oranges and 4¼ ounces of sandal wood. Add 2¼ pounds of orange peel and 12 gallons of good rye whiskey. Let the mass digest for 14 days, then press, filter, and sweeten it with a solution of 3⅓ pounds of sugar in 1 pint of water.

Breslau Bitter Cordial.

Cassia	1½	pounds
Cloves	5¼	ounces.
Mint leaves	4¼	"
Caraway seed	2	"
Fennel seed	4¼	"
Anise seed	8½	"
Coriander seed	2	"
Ginger	2½	"
Cubebs	2	"
Rosemary leaves	1½	"
Cardamons	4¼	"
Juniper berries	5¼	"
Lavender blossoms	1½	ounces.
Nutmegs	4¼	"
Roman camomile	3	"
Orris root	3	"
Angelica	6½	"
Oranges	6½	"
Orange peel	7½	"
Lemon peel	10½	"
Gentian root	4¼	"
Galanga	5¼	"
Calamus root	3	"
Wormwood	5¼	"
Alcohol of 90 per cent. Tr.	8	gallons.

Is sweetened with a solution of 58 pounds of brown sugar in 10 gallons of water and allowed to digest for 8 to 10 days, when it is filtered. This cordial is colored either dark yellow or dark red.

Calamus Liqueur. Macerate 9 pounds each of calamus root and of angelica root in 4¾ gallons of alcohol of 90 per cent. Tr., and let it stand for 6 days. Then filter the fluid, sweeten it with a solution of 22 pounds of sugar in 1½ gallons of water, and color it red.

Cardinal Water. Distil:

Fresh lemon peel	3.3	pounds.
Balm	5½	ounces.
Anise seed	4½	"
Coriander seed	4½	"
Cinnamon	8¾	"
Mace	2¼	"
Nutmeg	1	"
Alcohol of 90 per cent. Tr.	4¾	gallons.
Water	4	"

Dissolve 26¼ pounds of syrup in 5¼ gallons of water; add the solution to the distillate. Color sky blue.

Cardinal de Rome. Dissolve 2 flu drachms of oil of lemon, 1 fluid drach of oil of cloves, 40 drops of oil of nu meg, 20 drops of oil of cinnamon, and grains of gray ambergris in 3 gallo of spirit of wine, sweeten the fluid wi a solution of 11 pounds of sugar in gallons of water and filter.

Carminative Cordial. Distil:

Dried green orange peel	6½	ounces.
Dried green lemon peel	6½	"
Caraway seed	4½	"
Juniper berries	3¼	"
Anise seed	3¼	"
Camomile	3¼	"
Mint	2¼	"
Nutmeg	1	"
Alcohol of 90 per cent. Tr.	4¾	gallons
Water	4	"

Add 27½ pounds of syrup and 3⅓ gallons of water to the distillate.

Capuchin Cordial. Dissolve 1¼ flui drachms of oil of parsley, 1 fluid drach of oil of orange blossoms, 24 drops of o of cinnamon, 1¼ fluid drachms of cum oil, and 20 drops each of anise seed oi oil of mace, and fennel seed oil in gallons of alcohol of 90 per cent. Tr. sweeten the solution with a syrup mad of 5½ pounds of sugar and 1⅓ gallons of water. Color brown.

Chartreuse. Three varieties of thi liqueur, differently colored, are found i commerce. The following receipts ca be highly recommended for manufacturing this liqueur.

	Green. Ozs.	Yellow. Ozs.	White Ozs.
Mountain wormwood	1¾	¾	¾
Aloes		⅙	
Angelica seed	¾	¾	¾
Angelica root	½	¾	10 grain
Arnica blossoms	⅛	⅛	
Buds of poplars	1		
Calamus root			¼
Cassia	⅛	⅛	¾
Cardamons		¼	¼
Coriander seeds		10½	
Tonka beans			35 grai
Cloves		⅛	¼
Hyssop in bloom	2	1	¾
Nutmeg	⅛	⅛	¼
Mace			⅛
Balm	3½	1¾	¾
Peppermint	1¾		
Thyme	¼		
Spirit of wine of 85 per cent. Tr.	2¾ gl.	1¾ gl.	2⅓
Sugar	11 lb.	11 lb.	16½

Macerate the herbs in the alcohol fo about 36 to 48 hours, add a quantity o alcohol equal to that of the distillat and rectify the resulting product wi the addition of an equal quantity water. Then mix the distillate wi the cold solution of the sugar, and ad a sufficient quantity of water, so th the entire product will amount to gallons; then color the liqueur gree or yellow.

Cherry Liqueur. Mix 1¾ gallons cherry juice and 2¼ gallons of pure alco hol, and dissolve in the mixture ¼ oun of Indian balsam, 1 drachm each of o of cinnamon and oil of bitter almon and 35 drops of oil of cloves. Sweet the solution with 13¼ pounds of syr and 4½ pounds of white sugar dissolv in 4¾ gallons of water, and after shakin the fluid thoroughly store it away un it becomes clear.

Cherry Cordial. To a mixture of

pounds of cherry juice and 3 quarts of alcohol of 80 per cent. add 16 drops of oil of cloves, 1 pound of sugar, and 3½ quarts of water, and filter the cordial.

Chocolate Liqueur.

Cocoa beans moderately roasted and crushed	3⅓	pounds.
Finest cassia	3¼	ounces.
Cloves	1¼	“
Vanilla	¾	“
Cardamons	½	“
Saffron	⅛	“
Cinnamon flowers	1¼	“
Alcohol of 90 per cent. Tr.	2¼	gallons.
Water	5¼	“
White sugar	28½	pounds.

Color dark red with cochineal.

Christofle. Dissolve 80 drops of oil of orange peel, 60 of oil of lemon, 40 of oil of cinnamon, 40 of oil of balm, 32 of oil of cloves, and 24 of oil of mace in 13 pounds of alcohol of 90 per cent. Tr., add a solution of 5½ pounds of sugar in 1½ gallons of water and filter.

Citronelle. Comminute 8½ ounces of lemon peel, 3¼ ounces of orange peel, ¼ ounce of nutmegs, and ⅛ ounce of cloves. Pour 1¾ gallons rectified spirit of 90 per cent. Tr. over these ingredients and allow them to digest for 8 days, when they are pressed out and the fluid is filtered and compounded with a solution of 6½ pounds of sugar in 1½ gallons of water and the liqueur colored yellow.

Crambambuli. Mix 1 fluid drachm each of oil of cloves and oil of mace, ½ fluid drachm of oil of cinnamon, and 20 drops of oil of cardamon with 1¾ gallons of rectified spirit of 90 per cent. Tr. Sweeten the solution with a syrup made of 5½ pounds of sugar and 1⅓ gallons of water, and filter.

Danzig Crambambuli. Comminute 4¼ ounces of cinnamon, 1 ounce of cloves, ½ ounce of ginger, 1 ounce of mace, and ½ ounce of anise seed. Pour 2¾ gallons of rectified spirit of 90 per cent. Tr. over these ingredients, let them digest for 14 days, then press them out, filter the fluid, and sweeten it with a solution of 8¾ pounds of sugar in 2¼ gallons of water.

Cumin Cordial (Kümmel). I. Dissolve 2 fluid drachms of cumin oil and 4 fluid drachms of anise seed oil in 1¾ gallons of rectified spirit of 90 per cent. Tr., and sweeten the solution with a syrup made of 6½ pounds of sugar and 1½ gallons of water.

II. 1¼ fluid drachms of cumin oil, 24 drops of oil of coriander seed, 24 drops of oil of orange peel, 24 drops of cognac essence. Treat and sweeten in the same manner as No. I.

III. Dissolve 1¼ fluid drachms of cumin oil, 24 drops of fennel oil, 12 drops of oil of cinnamon, in 1½ gallons of rectified spirit of 90 per cent. Tr. Sweeten the solution with a syrup made of 1½ pounds of sugar and 1½ gallons of water, and filter.

Cumin Liqueur. Macerate for 6 days 1 pound of caraway seed, 1 ounce of anise seed, ½ ounce of orris root, ½ ounce of cinnamon, ¼ ounce of angelica root, ⅛ ounce of cloves, in 2½ gallons of alcohol of 90 per cent. Tr. Sweeten the solution with a syrup made of 11 pounds of sugar and 2 gallons of water, and filter.

Curaçoa. Comminute 1 pound of fresh orange peel, ¼ ounce of nutmegs, 2 ounces of cinnamon. Pour 2 gallons of rectified spirit of 90 per cent. Tr. over them, allow them to digest for 8 to 10 days, and compound the filtered fluid with a solution of 6½ pounds of sugar in 1½ gallons of water.

French Curaçoa. Dissolve 1¼ fluid drachms of oil of orange peel, 20 drops of oil of cinnamon, 12 drops of oil of mace, 30 drops of vanilla essence, 30 drops of raspberry essence, and 4¼ fluid ounces of Jamaica rum in 1¾ gallons of rectified spirit of 90 per cent. Tr., and add a solution of 6½ pounds of sugar in 1½ gallons of water.

Holland Curaçoa. Dissolve 1¼ fluid drachms of oil of orange peel, 20 drops of cognac essence, 8 drops of oil of lemon, 10 drops of oil of mace, and 1 fluid drachm of vanilla essence in 1¾ gallons of rectified spirit of 90 per cent. Tr., and compound the fluid with a solution of 6½ pounds of sugar in 1½ gallons of water. Color the liquor light brown.

Eau Americaine.

Orange peel	1	pound.
Rosemary leaves	4½	fluid oz.
Lavender blossoms	4½	“
Cinnamon	3¼	“
Cloves	2¼	“
Nutmegs	1	“
Alcohol of 90 per cent. Tr.	4¾	gallons.
Water	4	“

Add to the distilled fluid 3 gallons of water and 26 pounds of syrup, and color the distillate green.

Eau D'Amour. Distil:

Bitter almonds	13¼	ounces.
Fresh lemon peel	13¼	“
Cinnamon	6½	“
Mace	1	“
Cloves	½	“
Lavender blossoms	9	“
Alcohol of 90 per cent. Tr.	4¾	gallons.
Water	4	“

Then add 1¾ gallons of Muscatel wine, 37 drops of ambergris essence, 22 pounds of syrup, and 1½ gallons of water, and color the fluid rose-red.

Eau D'Argent. Distil:

Fresh lemon peel	1	pound.
Cloves	2¼	ounces.
Angelica seed	1¾	“
Badian seed	1¾	“
Florentine orris root	1¾	“
Cinnamon	2¼	“
Alcohol of 90 per cent. Tr.	4¾	gallons.

Add to the distillate 1¾ quarts of balm water, 26½ pounds of sugar syrup, and 2¾ gallons of water. Color the fluid red, and mix some silver leaf macerated with honey with it.

Eau D'Ardelle. Distil 4½ ounces each of mace and of cloves, 4¾ gallons of alcohol of 90 per cent. Tr., and 4 gallons of water. Mix with the distillate 3⅓ gallons of syrup and 2¾ gallons of water, and color violet.

Eau D'Absynth Citronné. I. Distil 4½ pounds of wormwood leaves, ¾ ounce of lemon peel, 4¾ gallons of alcohol of 90 per cent. Tr., and 4 gallons of water. Add to the distillate 1¼ fluid drachms of oil of peppermint, 26½ pounds of syrup, and 3⅓ gallons of water.

II. Dissolve 1¼ fluid drachms of oil of lemon, ¾ fluid drachm of oil of wormwood, 24 drops of oil of peppermint, 15 drops of anise seed oil, 1¼ fluid drachms of oil of cardamon in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten with a solution of 5½ pounds of sugar in 1⅛ gallons of water, and color green. The same quantity of oil of orange blossoms may be used instead of cardamon oil.

Eau De Cypre. Dissolve 1¼ fluid drachms of oil of lemon, 30 drops of oil of bergamot, 20 drops each of oil of cinnamon, oil of orange blossoms and of vanilla essence, and 24 drops of oil of cardamon in 1¾ gallons of rectified spirit of 90 per cent. Tr., and sweeten with a solution of 6½ pounds of sugar in 1½ gallons of water. The liquor is left either colorless or colored pale yellow.

Eau de Dauphin. Dissolve 5 drops of oil of juniper, 20 drops each of angelica oil, coriander oil, and oil of ginger, 10 drops of oil of cardamon, and a like quantity of badian seed oil in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten by adding a solution of 3⅓ pounds of sugar in 1½ gallons of water, and filter.

Eau de Napoléon. Distil:

Fresh jasmine blossoms	6½	ounces.
Fresh lemon peel	11	“
Cloves	3¼	“
Cinnamon	3¼	“
Nutmegs	2¼	“
Alcohol	5	gallons.

Then add to the distillate: 2 fluid drachms of vanilla essence, 3½ quarts of double distilled rose water, 3½ quarts of orange flower water, 1¾ quarts of peppermint water, 3 pounds of sugar syrup, 3½ quarts of water, and color blue.

Eau D'Orient. Distil:

Fennel	1	pound.
Dates	¾	“
Lemon peel	¾	“
Orange peel	¾	“
Pine apples	¼	“
Grains of Paradise	2	ounces.
Calamus	2¼	“
Allspice	2	“
Alcohol of 90 per cent. Tr.	4¾	gallons.
Water	4	“

Add to the distillate 2½ gallons of sugar syrup and 5¼ gallons of water, and color blue.

Eau D'Or (Gold water). Dissolve ¾ fluid drachm of oil of lemon, 24 drops of oil of cinnamon, 24 drops of oil of coriander, 20 drops of oil of mace, 15 drops of oil of orange blossoms in 1¾ gallons of rectified spirit of 90 per cent. Tr., and sweeten by adding a solution of 7 pounds of sugar in 1¾ gallons of water. Color the fluid pale yellow, filter, and add a small quantity of finely macerated gold leaf.

Eau de Paradise (*Paradise Water*). Distil:

Fresh lemon peel	2¼	pounds.
Angelica root	3¼	ounces.
Orris root	2	“
Calamus	2¾	“
Anise seed	2¾	“
Rosewood	2	“
Cardamons	1	“
Alcohol of 90 per cent. Tr.	4¾	gallons.

Add to the distillate 26½ pounds of sugar syrup and 3 gallons of water. Color green and add some silver leaf rubbed fine.

Eau des Princesses. Dissolve 80 drops of oil of lemon, 80 of oil of bergamot, 40 of oil of cloves, 40 of oil of balm, 20 each of oil of cinnamon, oil of bitter almonds, and oil of peppermint, 60 of vanilla essence, and 40 each of rose essence and orange blossom essence in 2 gallons of rectified spirit of 90 per cent. Tr., sweeten with a solution of 7¾ pounds of sugar in 1½ gallons of water, and filter.

Eau Precieuse. Comminute 4¼ ounces of rosewood and a like quantity of bitter almonds, and let the mass digest for 6 to 10 days in 3 gallons of rectified spirit. Then press out, filter, and add to the filtrate 20 drops of oil of cloves, 12 of oil of lemon, and 12 of oil of nutmeg, and also a solution of 8¾ pounds of sugar in 2¼ gallons of water. This liquor is colored green, and a small quantity of silver leaf macerated in alcohol is added.

Eau Royale. Distil:

Lemon peel	11	ounces.
Orange peel	11	“
Jasmine blossoms	8¾	“
Mace	4½	“
Cinnamon	4½	“
Cloves	2¼	“
Nutmeg	1	“
Alcohol of 90 per cent. Tr.	4¾	gallons.
Water	1¾	“

Add to the distillate 20 drops of ambergris essence, 2 fluid ounces of vanilla essence, a like quantity of orange flower water, 2½ gallons of water, 26½ pounds of sugar syrup, and color the fluid red.

Eau de Santé. Mix 4 fluid drachms of oil of lemon, ¾ fluid drachm each of oil of rosemary, oil of lavender, oil of peppermint, oil of angelica, oil of marjoram, and oil of cubebs, and 13¼ pounds of sugar in 3 gallons of rectified spirit of 90 per cent. Tr. Color the solution green and filter.

Eau de Sept Graines (*Water of Seven Seeds*). Comminute ½ ounce each of anise seed, fennel seed, caraway seed, and coriander seed, and 6 grains each of dill seed and of wild thyme seed. Macerate the seeds for about 14 days in 3½ quarts of French brandy, then filter, and sweeten with a solution of 2¾ pounds of sugar in ¾ of a pint of water.

English Bitters. I. Compound 4¼ ounces of English Bitters essence (see *Essences*) and ¾ fluid drachm of cognac essence; sweeten the liquid with a solution of 4½ pounds of sugar in 1⅓ gallons of water, filter, and color brown.

II. Compound 80 drops of oil of orange peel, 60 of oil of angelica, 40 of oil of wormwood, 24 of oil of marjoram, and 16 of oil of cardamon with 1¾ gallons rectified spirit of 90 per cent. Tr.; sweeten the solution with 5½ pounds of sugar in 1½ gallons of water, filter, and color brown.

Greek Bitters. Dissolve 80 drops of oil of lemon, 48 of oil of wormwood, 40 each of oil of angelica and oil of calamus, 24 each of oil of mace, oil of cloves, oil of bitter almonds, and 12 of cardamon oil, in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten this solution with a syrup of 6 pounds of sugar and 1½ gallons of water, filter, and color reddish brown.

Hamburg Bitters. Dissolve 120 drops of oil of cinnamon blossoms, 40 each of oil of cloves, oil of calamus, and oil of wormwood, 24 of oil of mace, and 20 of oil of cardamon, in 1¾ gallons of rectified spirit of 90 per cent. Tr., and add a solution of 5½ pounds of sugar in 1⅓ gallons of water; filter the fluid and color it brown.

Juniper Liqueur. I. Compound 2 fluid drachms of oil of juniper and 24 drops of oil of cardamon with 1¾ gallons of spirit of 90 per cent. Tr.; sweeten the mixture with a solution of 5½ pounds of sugar in 1½ gallons of water, and filter the fluid.

II. Dissolve 2 fluid drachms of oil of juniper, 24 drops of oil of ginger, 24 drops of oil of coriander, and 1¼ fluid drachms of cognac essence in 2 gallons of rectified spirit of 90 per cent. Tr., and sweeten the solution with 5½ pounds of sugar dissolved in 1½ gallons of water.

Koch's Herb Extract. Macerate:

Lemon peel	4½	ounces.
Calamus	2¼	“
Cinnamon	2¼	“
White ginger	2¼	“
Peruvian bark	2¼	“
Orris root	2¼	“
Juniper berries	4½	“
Bay leaves	2¼	“
Cubebs	2¼	“
Orange peel	2¼	“
Roman camomile	1⅛	“
Elder flowers	1⅛	“

in 2¼ gallons of rectified spirit of 90 per cent. Tr. Then press out and filter the fluid.

Maraschino. Compound 1 pound of maraschino essence with 4½ gallons of rectified spirit of 90 per cent. Tr. and 9 gallons of water; sweeten the mixture with a solution of 44 pounds of sugar, and filter.

Mogador. Dissolve 40 drops each of oil of wormwood, oil of calamus, oil of peppermint, and oil of orange peel, and 20 drops each of oil of cinnamon, oil of cloves, oil of ginger, and oil of balm in 1¾ gallons rectified spirit of 90 per cent. Tr.; sweeten the solution with 6 pounds of sugar dissolved in 7 pints of water, color it red with bilberry juice, and filter.

Nectar. Dissolve 120 drops of oil of lemon, 80 of fennel oil, 40 each of oil of calamus, oil of cinnamon, oil of cardamon, and oil of orange blossoms in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 6½ pounds of sugar dissolved in 1⅓ gallons of water, color it blue, and filter.

Orange Peel Cordial. I. Dissolve 2 fluid drachms of oil of orange peel in 1¾ gallons of rectified spirit of 90 per cent. Tr.; add 6½ pounds of sugar in 1½ gallons of water, color the fluid yellow and filter.

II. Comminute ½ pound of fresh orange peel, pour 1¾ gallons of rectified spirit of 90 per cent. Tr. over them sweeten with 6½ pounds of sugar dissolved in 1½ gallons of water, and filter.

Parfait D'Amour. Dissolve 80 drops of oil of lemon, 40 of oil of cinnamon, 30 of oil of bergamot, 20 of oil of cloves, 16 of oil of nutmegs, and 10 each of oil of lavender blossoms and oil of rosemary in 2¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 8¾ pounds of sugar dissolved in 2 gallons of water, color the fluid pale red, and filter.

Peach Cordial. Cut 1 pound of peaches in slices, then pour 1¾ gallons of rectified spirit of 90 per cent. Tr. over them, and allow the mass to digest for 8 to 10 days. Then filter and mix the filtrate with 1½ gallons of good white wine and 7¾ pounds of sugar dissolved in 1¾ quarts of water.

Peppermint Cordial. Dissolve 2 fluid drachms of oil of peppermint in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 6½ pounds of sugar dissolved in 1½ gallons of water, and filter.

Or, Dissolve 2 fluid drachms of oil of peppermint and 1 fluid drachm of cognac essence in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 6½ pounds of sugar dissolved in 1½ gallons of water, and filter.

Polish Water. Comminute 6½ ounces of dried currants, 1 ounce each of anise seed, cinnamon, cloves, fennel seed, mint, rosemary, marjoram, and galanga. Pour 4 gallons of alcohol and 3 gallons of rose-water over them, and let the mass digest for 14 days. Then add 44 pounds of sugar syrup, and filter.

Polish Whiskey. Comminute ½ pound of large raisins, 1 ounce of licorice root, ¾ ounce each of cinnamon and cardamons, ¼ ounce each of cloves, galanga, gum ammoniac, anise seed, and coriander seed, and ⅛ ounce of saffron. Pour 1¾ quarts of whiskey over these ingredients, let the mass digest for a few days, then press the liquor out, filter it, and sweeten it to the taste with sugar dissolved in rose-water.

Quince Cordial (*Quittico*). Powder coarsely 2 ounces of cinnamon, ½ ounce of coriander seed, ½ ounce of white ginger, and ¼ ounce of nutmeg. Macerate these ingredients for 8 days in 1 pint of spirit of wine 85 per cent. strong, then strain and press out the liquid and add 7 pounds of fresh quince juice in which 6 pounds of white sugar have been dissolved, and add 3 quarts of spirit of wine 85 per cent. strong. Mix the mass thoroughly and filter through felt or blotting paper.

Rosemary Cordial. Dissolve 2 fluid drachms of oil of rosemary and 24 drops of oil of lemon in 1¼ pints of rectified spirit of 80 per cent. Tr.; sweeten the solution with 1 pound of sugar dissolved in 1½ gallons of water, and filter.

Rossolio de Turin. Comminute 1

pound of fresh rose leaves, ½ pound each of jasmine blossoms and orange blossoms, 1 ounce each of orris root and cinnamon, ¼ ounce each of cloves and vanilla. Pour 1¾ gallons of spirit of wine over these ingredients and let them macerate for 8 to 12 days, placing them in a warm place. Then pour off the fluid, press out the residue, sweeten the liquor with 7½ pounds of sugar, and let it stand for 3 to 4 weeks. Then pour off the clear liquor, filter the sediment, and color red with cochineal or cherry juice.

Rostopschin. Dissolve 1¼ fluid drachms of anise seed oil, ½ fluid drachm of oil of cardamons, 40 drops of oil of lemon, and 20 drops each of oil of cinnamon and oil of coriander seed in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 6½ pounds of sugar dissolved in 1½ gallons of water, and filter.

Scubac. Comminute 4¼ ounces of juniper berries, 2 ounces of coriander seed, 1 ounce each of saffron and cinnamon, ½ ounce each of angelica seed and anise seed, ¼ ounce each of mace and cloves, and the fresh peel of 4 lemons. Pour 2 gallons spirit of wine over these ingredients and let them macerate for 2 to 3 weeks. Then boil 1½ ounces of raisins or dates in 1¾ gallons of water, pour off the liquor, press out the residue, and sweeten with 6½ pounds of sugar, and add this to the liquor pressed out of the macerated mass. Let the whole stand for 3 or 4 weeks, then pour off the clear liquor and filter the sediment.

Soya Aqua Vitæ. Comminute 3 ounces of anise seed, 1 ounce each of coriander seed, elecampane root, nutmeg, and cloves, ½ ounce each of caraway seed and elderberry blossoms, ¼ ounce of Roman camomile, 4¼ ounces each of lemon peel and orange peel, and 1½ ounces of cinnamon. Macerate these ingredients in alcohol for 2 or 3 weeks, then distil them with 5½ gallons of rectified spirit, add the necessary quantity of sugar, and compound the distillate with 1¾ pints of rose-water and as much water as may be required.

Spanish Bitters. Dissolve 80 drops of oil of Crete marjoram (origan), 40 each of oil of bitter oranges and oil of wormwood, and 20 each of oil of angelica, oil of cardamon, oil of calamus, oil of marjoram, and oil of thyme in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 6½ pounds of sugar dissolved in 1½ gallons of water, color it brown, and filter.

Stettin Bitters. Macerate 1 pound of gentian root, 8¾ ounces of wormwood, 1 pound of cloves, 4½ ounces each of coriander seed, cinnamon, and orange peel, 2¼ ounces each of green oranges and quassia in 9¼ gallons of spirit of wine 40 per cent. strong. Pour off the fluid, strain the residue, add 11 pounds brown sugar, filter the liquor, and color it brown.

Stomach Bitters. I. Comminute 2 ounces each of calamus, anise seed, caraway seed, and fennel, 1½ ounces each of ginger and cinnamon, ½ ounce of mace, 1 ounce of cloves, 4¾ ounces of lemon peel, 1 ounce each of galanga, zedoary, and cubebs, ½ ounce of pepper, ¾ ounce of sassafras bark, 1½ ounces each of rose leaves, myrrh, and lavender blossoms, and 2 ounces of orris root. Pour 2 gallons of whiskey and 1¾ pints of water over the ingredients, let them macerate for 8 days, then press them out, filter the liquor, and add some common salt and 4½ pounds of crushed sugar.

II. Comminute ½ ounce each of speedwell, mint, balm, wormwood, arum root, zedoary, calamus root, small pomegranates, caraway seed, and cinnamon. Pour over them 1¾ quarts of good whiskey and let them macerate for 14 days in a warm place, with frequent shaking in the meanwhile. Then press the liquor out, filter, and put it in bottles.

III. Dissolve 40 drops each of oil of orange peel, oil of wormwood, oil of mint, and oil of calamus, 20 drops each of oil of marjoram, oil of cinnamon, oil of cloves, and oil of cardamon, and 1¼ fluid drachms of cognac essence in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 6½ pounds of sugar dissolved in 1½ gallons of water, color the liquor brown, and filter.

IV. Dissolve 60 drops of oil of orange peel, 40 each of oil of calamus, oil of angelica, oil of cardamon, oil of wormwood, oil of ginger, and oil of marjoram, and 2 fluid drachms of cognac essence in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 5½ pounds of sugar dissolved in 1½ gallons of water, and filter.

V. *Vienna Stomach Bitters.* Dissolve 40 drops each of oil of balm, oil of orange peel, and oil of angelica, 24 drops each of oil of marjoram, oil of wormwood, oil of cinnamon, oil of coriander seed, and oil of mace, and ½ fluid ounce of cognac essence in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 7¾ pounds of sugar dissolved in 2½ quarts of water. Color red and filter.

Swiss Cordial. Dissolve 40 drops each of oil of wormwood, oil of calamus, and oil of peppermint, 24 drops each of oil of bitter oranges, oil of marjoram, oil of cinnamon, oil of cloves, and oil of cardamons in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 4½ pounds of sugar dissolved in 1⅓ gallons of water, color the fluid green, and filter.

Thiem's Bitters. 1 pound of peeled calamus root, 2¼ pounds of orange peel, ½ pound of galanga, ¾ pound of white cinnamon, 5¾ ounces of cardamons, 4¾ ounces each of cloves and allspice, 2¼ ounces each of anise seed and fennel, 5¾ ounces of nutmeg, 1 ounce of Roman camomile, and 2¼ ounces of elecampane root are digested in 17 gallons of spirit of wine 50 per cent. strong for 24 hours in a still, and then 8½ gallons of liquor are distilled off, 55 pounds of sugar are dissolved in the distillate, and a sufficient quantity of water is added to give a volume of 26½ gallons of liqueur 30 per cent. strong.

Tivoli Cordial. Dissolve 80 drops each of oil of coriander seed and oil of mace, and 40 drops each of oil of lemon, tincture of vanilla, oil of cinnamon, and tincture of orris root in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 5½ pounds of sugar dissolved in 1⅓ gallons of water, and color the cordial brown.

Trappistine. 3½ ounces each of wormwood and angelica root, 1¾ ounces each of myrtle leaves and calamus root, ⅓ ounce of cloves, 3½ ounces of cardamons, 7 ounces of peppermint, 2½ ounces of common balm leaves, ⅓ ounce of cinnamon, and ⅛ ounce of nutmeg are macerated for 48 hours in 2¼ gallons of rectified spirit 85 per cent. strong; 2¼ gallons of water are then added and the macerated mass is distilled. One gallon of water is then added to the distillate, and this is compounded with a *cold* syrup of 17½ pounds of sugar in 1 gallon of water, and finally a sufficient quantity of water is added to give an entire product of 5½ gallons. This liqueur is colored green.

Vanilla Cordial. Macerate 2½ ounces of vanilla beans for a few days in 1⅓ gallons of rectified spirit and 3 gallons of water, and then distil the mass. Add 22 pounds of dissolved sugar to the distillate, color it with cochineal, and filter.

Véritable Extrait d'Absinthe. Five pounds of anise seed, a like quantity of fennel, 1½ pounds of elecampane root, 2 pounds of calamus, 2 ounces of wormwood, 2½ ounces of leaves and stalks of wild basil, 6½ ounces of bitter almonds, 2 ounces each of hyssop, mint, and gnaphalium flowers are comminuted and digested in 3 gallons of rectified spirit of 90 per cent. Tr. The macerated mass is then pressed out, the liquor filtered, and 2 gallons of rum are added, and the fluid sweetened with 5 pounds of brown sugar dissolved in 2½ gallons of water.

Vienna Bitters. Dissolve 40 drops each of oil of bitter oranges, oil of wormwood, and oil of Crete marjoram (origan), 32 of oil of calamus, 20 each of oil of peppermint, oil of marjoram, oil of anise seed, oil of thyme, and oil of cinnamon, 24 of oil of coriander seed, and 12 of oil of cloves in 2 gallons of rectified spirit of 90 per cent. Tr. Add 3 quarts of good red wine to the solution, sweeten it with 6½ pounds of sugar dissolved in 3½ quarts of water, color it red, and filter.

Wormwood Cordial. Dissolve 1¼ fluid drachms of oil of wormwood, 32 drops of oil of lemon, and 20 drops each of oil of cinnamon and oil of cardamon in 1¾ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with 5½ pounds of sugar dissolved in 1⅓ gallons of water, and filter.

VI. RATAFIAS. *Barbadoes Ratafia.* Dissolve 80 drops of oil of lemon, a like quantity of oil of bergamot, 40 each of oil of cinnamon, oil of cloves, and oil of mace, and 1¼ fluid drachms of vanilla tincture in 1¾ gallons of rectified spirit of 90 per cent. Tr., and add 11 pounds of sugar, dissolved in 1⅓ gallons of water.

Cocoa Ratafia. Seven pounds of

roasted cocoa are digested for 14 days in 1 gallon of alcohol 35 per cent. strong. Sweeten the mixture with 18¾ pounds of sugar dissolved in 2½ quarts of water, filter and add 90 drops of vanilla tincture.

Citronat-Ratafia. Dissolve 2½ fluid drachms of oil of lemon and 1 fluid drachm each of oil of bergamot, vanilla tincture, and essence of roses in 2 gallons of rectified spirit of 90 per cent. Tr., and sweeten the solution with 13 pounds of sugar dissolved in 1½ gallons of water.

Claret Ratafia. Comminute 2 ounces each of anise seed, dill, fennel, and coriander seed, and 4¼ ounces of caraway seed; macerate these ingredients for 14 days in 2 gallons of whiskey 22 per cent. strong, then strain the macerated mass through a linen cloth; add 5½ pounds of sugar dissolved in ¾ pint of water, and filter.

English Bitters Ratafia. Dissolve 80 drops of oil of bitter almonds, a like quantity of oil of angelica, 40 of oil of marjoram, 32 of oil of balm, 20 each of oil of wormwood and oil of cardamons, 120 of cognac essence, and 80 of vanilla tincture in 1¾ gallons of rectified spirit of 90 per cent. Tr., and sweeten the solution with a syrup made of 10 pounds of sugar and 1⅓ gallons of water.

Fennel Ratafia. Dissolve 2 fluid drachms of fennel oil, ¾ fluid drachm of oil of coriander seed, a like quantity of oil of anise seed, and 1½ fluid drachms of orange blossom essence in 1¾ gallons of rectified spirit of 90 per cent. Tr., and sweeten the solution with a syrup made of 10 pounds of sugar and 1⅓ gallons of water.

Ginger Ratafia. Comminute ½ pound of ginger and ⅛ ounce of vanilla beans. Pour 1¾ gallons of rectified spirit of 90 per cent. Tr. over these ingredients, let them stand for some time, draw off the fluid, and sweeten it with a solution of 10 pounds of sugar in 1⅓ gallons of water.

Ratafia Chinoise (*Chinese Liqueur*). Comminute 1½ pounds of green oranges and 5¼ ounces of fresh stems of angelica; pour 2½ gallons of spirit of wine over these ingredients, and let them macerate for 10 to 15 days. Then press the macerated mass out, filter the liquid, and sweeten it with 9 pounds of sugar dissolved in 1 gallon of water.

Ratafia de Grenoble. Comminute 1 drachm of cinnamon, ¾ ounce of cloves, 8½ ounces of peach leaves, and a like quantity of cherry stones. Pour 1 gallon of whiskey over these ingredients, and let them digest for 2 to 3 weeks, when they are distilled. Add to the distillate 1 gallon of cherry juice, in which 2¼ pounds of sugar have been dissolved.

Mulberry Ratafia. Pour 22 pounds of spirit of wine over 26¼ pounds of mulberries, 1 pound of orris root, the juice of 4 lemons and of 4 oranges, and the peel of these fruits. Let them macerate for 4 to 6 weeks, then filter and compound the filtrate with 6½ to 9 pounds of sugar syrup.

Orange Ratafia. Slice 20 oranges, pour 13¼ pounds of rectified spirit of 90 per cent. Tr. over them, and let them stand for 8 days. Then press out the fluid, filter it, and add a solution of 10 pounds of sugar in 1⅓ gallons of water.

Apple Ratafia. 26½ pounds of apple juice, ½ ounce each of cloves and mace, 7¾ pounds of sugar, and 22 pounds of spirit of wine are allowed to digest for 4 to 6 weeks, then add some ambergris, filter, and color the fluid yellow.

Pear Ratafia. 26½ pounds of pear juice, ½ ounce each of mace and cloves, 7¾ pounds of sugar, and 22 pounds of spirit of wine. Treat in the same manner as apple ratafia.

Stomachic Ratafia. Comminute 8½ ounces of pomegranates, 1 ounce of calamus root, ½ ounce of cloves, 2 ounces of caraway seed, 1 ounce of cinnamon, and ¼ ounce of mace. Pour 1 gallon of spirit of wine over the ingredients, and allow them to digest for 16 or 20 days. Then pour off the liquid, and press out the residue. Pour 3 quarts of boiling water over 1 ounce of peppermint, drain off the fluid, dissolve in it 3½ pounds of sugar, and add this to the above fluid. Then let it stand quietly for 3 or 4 weeks, when the clear fluid is poured off, and the sediment filtered.

Celery Ratafia. 4½ ounces of celery seed, 5 drachms of coriander seed, and 3 drachms of cardamons are comminuted and digested for 3 weeks in 2½ quarts of whiskey 24 per cent. strong, when they are distilled on a water bath. The distillate is sweetened with 2¼ pounds of sugar dissolved in 1½ pints of water.

Scotch Ratafia. Mix 5½ ounces of jujube berries, 2¼ ounces of saffron, 1½ ounces of dates, 1½ ounces of grapes, ¾ drachm of coriander seed, ¾ drachm of cinnamon, and pour ¾ gallon of whiskey of 24 per cent. over the mixture. After allowing it to digest for 14 days, pour off the fluid, and add to it the fluid pressed from the residue. Sweeten with 2¾ pounds of sugar dissolved in 1⅓ pints of water.

Vanilla Ratafia. Cut 1 ounce of vanilla beans in small pieces. Pour 13¼ pounds of rectified spirit of 90 per cent. Tr. over them, add ½ fluid drachm of oil of orange blossoms, let them stand for 8 days, then filter, add 11 pounds of sugar dissolved in 1⅓ gallons of water, and color pale red.

Wormwood Ratafia. Dissolve 2 fluid drachms of oil of wormwood, 32 drops of oil of cinnamon, 20 drops each of oil of cloves and oil of cardamons in 1½ gallons of rectified spirit of 90 per cent. Tr.; sweeten the solution with a syrup of 8¾ pounds of sugar, add 1 gallon of water, and color green.

HOUSEHOLD AND RURAL ECONOMY

Champagne Powder. To convert any wine, at a moment's notice, into champagne, take 30 grains of dry, pulverized bicarbonate of sodium, 23 grains of dry, powdered tartaric acid, and 2 ounces of pulverized sugar. Put the powder into a strong champagne bottle containing the wine and cork immediately. Then turn the bottle up and the champagne will be ready in one minute.

Champagne Mixture. Add to 5 quarts of must wine 1 pound of white sugar and a little alcohol. One glass of this mixture will convert any young wine into champagne.

Currant Champagne. Boil pure currant juice to the consistency of syrup and preserve in well-corked bottles. When to be used add a cupful of this syrup to ½ gallon of French wine and stir the mixture thoroughly.

English Champagne. To 10 pounds of gooseberry juice add 5 quarts of water and allow it to stand for 3 days; then press out and add 3 pounds of sugar and let it stand for 5 or 6 weeks, with occasional skimming, and add a small quantity of brandy and fill into bottles.

Fruit Champagne. Peel and grate juicy pears and press out the juice, which pour into a cask and cover the bung-hole with a linen cloth, and let the cask stand in a moderately warm room. Fermentation will begin in a few days, when the scum must be carefully removed. When the scum ceases, fill the cask with clear fermented pear juice (which has been fermented in a closely-corked bottle) and allow the cask to rest for 5 or 6 weeks in a cellar. Put a faucet in the cask about 4 inches above the chime, and draw the wine off into bottles and secure their corks with wire covered with pitch or wax. In about 2 weeks the wine will be fit for use, closely resembling champagne. It improves with age.

FRUIT WINES. *Apple Wine* (*Cider*). *English Process.* Store the apples for 10 to 14 days in an open shed and carefully reject the rotten ones. Then macerate the sound apples, enclose the pulp in a hair cloth, and place under a press, from which the juice is conveyed into barrels. If the apples are pressed without the hair cloth the bung-holes of the barrels must be covered with a brick until spring. The juice is then racked off into other barrels and ½ pound of hops and some burnt sugar are added and the bung-holes closed. The wine will not be fit to drink before a year.

Apple Wine (*Normandy Process*). The apples are crushed and pressed in the usual manner and the juice conveyed into barrels; but instead of allowing fermentation to take its course the juice, as soon as fermentation has commenced, is poured into other barrels, and again into others as soon as fermentation recommences. This is generally done 3 times.

The scum and precipitation of the 3 fermentations are then placed in woollen bags and suspended over a vat. The very clear apple wine draining from them is added to the rest. This wine has a very agreeable taste and can be kept for a long time.

Apple Champagne (*Champagne Cider*). To a champagne bottle full of apple wine take 2 to 3 ounces of sugar, dissolve it in the wine, add as quickly as possible ¾ ounce of finely-powdered tartaric acid and 1 drachm of finely-powdered bicarbonate of sodium, cork the bottle, secure the cork with wire, and let it lie for 8 days, when the champagne cider is ready for use.

Birch Wine. Bore holes in birch trees in the spring before the leaves appear and insert tubes to drain off the sap or juice. Branches of elder bush are often used for tubes. Large trees can be tapped in several places without injury. If a sufficient quantity of juice is not obtained in 1 day, it should be kept in bottles hermetically closed by covering the cork with wax or pitch.

Boil the juice, after a sufficient quantity has been collected, and carefully remove the scum as it arises. Then add 4 pounds of sugar and the rind of 1 lemon to every gallon of juice, and boil for ½ hour longer, carefully removing the scum. When cold the juice is fermented by adding yeast spread upon toasted bread, and is then allowed to stand for 5 to 6 days, being stirred occasionally. Now take a clean barrel holding exactly the quantity of wine prepared, suspend in it a piece of ignited sulphur, close the bung until the sulphur is extinguished, and then bring the wine into the barrel. As long as fermentation continues the bung is placed loosely in the bung-hole. When fermentation ceases the bung is driven in tight and the barrel allowed to lie for 3 months, when the wine is drawn into bottles.

Blackberry Wine. Cover ripe blackberries with boiling water in an earthen or wooden vessel and, when cool enough to admit the hand, crush the blackberries; cover the vessel and allow it to stand until the berries are forced to the top, requiring generally 2 or 3 days. The clear juice is then drawn off into a similar vessel and 1 pound of sugar added to every 3 gallons of fluid, when the whole is thoroughly stirred together and allowed to stand for 8 to 10 days. The wine is then filtered through a bag into a capacious vessel. The next morning 4 ounces of isinglass, previously soaked for 12 hours, are slowly boiled in 1 pint of white wine. When all is dissolved the above quantity is added to every gallon of the wine, the whole allowed to boil up once, and then poured into a cask.

Cherry Wine. Free perfectly ripe cherries from the stems, crush, and press them through a hair sieve. Then add to every gallon of juice 2 pounds of sugar and place it in a vessel just large enough to be entirely filled with it. When fermentation has run its course and no noise can be detected in the barrel, drive in the bung and allow the barrel to lay for 3 months, and then fill the wine into bottles.

Currant Wine. To every gallon of currant juice add 1 pound of sugar. When the sugar is dissolved put the juice in a cask, which should be entirely filled with it. Put this in a cellar until fermentation has run its course, then fill it up with juice previously fermented and close the bunghole. The wine remains in this barrel for 6 months, when it is drawn off into another barrel or into bottles.

Another Receipt. A beverage resembling Madeira wine is obtained by using equal parts of gooseberry and currant juice, dissolving in it 1 pound of sugar for every gallon of juice, and allowing the whole to ferment. The clear wine is then drawn off into another barrel and 1 pint of French brandy added to every gallon of it, when the bunghole is closed as tight as possible and the barrel allowed to lie in a cellar for 5 to 6 months, when the wine is drawn off into bottles.

Damson Wine. Ten pounds of damsons, when quite ripe, are crushed and boiled in 1½ gallons of water. Then press out the juice, add 3 pounds of sugar, let it ferment in a barrel, and add, after a fortnight, a little good brandy to it, when it will be fit to fill in bottles.

Elderberry Wine. Remove the stems from 100 pounds of elderberries, crush and boil them; then add 50 pounds of sugar, 2 pounds of cream of tartar, and 35 gallons of water, and let the mixture ferment. By adding a little ginger, cloves, raisins, and yeast, it will yield at the termination of the fermentation a wine similar to Cyprus wine.

Ginger Wine. Add 20 pounds of sugar to 12 gallons of water and boil to a syrup. Then boil in a separate vessel 1 pound of white Jamaica ginger in 2½ gallons of water and add, while boiling, a few lemon peels. Then mix both liquids, add a little yeast and 4 pounds of seeded raisins. Let it ferment for several weeks, and then add 1 pound of tartaric acid and 2 gallons of elderberry juice.

Honey Wine. To 2 pounds of honey add 1 gallon of water. Boil the mixture for 1 hour, continually skimming it; then add some yeast and let the liquid ferment, hanging into the barrel a bag containing bruised spices, such as coriander seeds, cloves, ginger, and calamus, of each 1 ounce. The fermented liquor will be clear after 1 month, when it can be drawn into bottles.

Orange Wine. Boil 40 pounds of sugar for ¼ hour with 13½ gallons of water. At the same time press out and filter the juice of 75 oranges and mix it, together with the rinds, with the sugary fluid after the latter has been cooled off to about 85° F. The mixture is then poured into a cask and frequently stirred during 3 or 4 days, when the cask is bunged and placed in a cellar for 6 months, when the wine is drawn off.

Orange Wine with Lemon. Dissolve 6½ pounds of sugar in 1½ gallons of water at a temperature about 105° F. Add to this the juice of 5 good lemons and 3 table-spoonfuls of beer yeast, and let the mixture ferment for 48 hours. In the meanwhile grate the rinds of the lemons and those of 25 oranges upon 1 pound of loaf sugar, add this to the fermenting liquid and immediately afterwards the juice of the 25 oranges, and then let the whole ferment for 48 hours longer. Then pour the fluid into a cask, add 1 pint of wine, bung the cask, and let it lie for 6 months, when the wine can be drawn off into bottles.

Raisin Wine. To 6¼ pounds of raisins add 20 pounds of water, 2 pounds of sugar, 8¾ ounces of cream of tartar, and sufficient yeast to bring the mass into fermentation. If the wine is to be consumed at once it is not necessary to add yeast.

Another Receipt. Pour 30 gallons of ordinary wine over 20 pounds of raisins previously picked over, freed from stems and stoned, and stir the mass thoroughly. Next prepare a solution of 8¾ pounds of fine loaf sugar in 1 gallon of water by boiling, and when this is cold add it to the raisins and wine; then add a saturated solution of ¼ ounce of bicarbonate of potassium and immediately afterwards a solution of ¼ ounce of tartaric acid in a little water. Bung the cask loosely, shake it thoroughly, place it in a moderately warm place, and then remove the bung. After 4 weeks add 4½ pounds of loaf sugar and a like quantity after 6 weeks. Fermentation will cease in 8 to 10 weeks. The wine can then be fined with gelatine, isinglass, or white of egg, and drawn off into bottles. It has an agreeable taste resembling very much that of Spanish wine.

Raspberry Wine. Crush the berries with a spoon and filter the juice through flannel into an earthen pot. To each quart of the juice add 1 pound of fine sugar, stir the mass thoroughly, and let it stand for 3 days. Then pour off the clear fluid, add to every quart of juice 2½ gallons of white wine, and fill the liquor in bottles. The wine can be used in 6 to 8 days.

Ginger Beer. To 3 gallons of water add 4½ ounces of bruised ginger root, 2 ounces of cream of tartar, and 4½ pounds of sugar. Boil for a few minutes, and after cooling add about 1 table-spoonful of fresh yeast. Cover up the vessel with a thick flannel cloth and let it stand over night. Then add a little essence of lemon, strain it, put the fluid in clean bottles, and secure the corks with twine or wire. The beer will be fit to drink after standing 4 days.

English Ginger Beer. Boil 3 ounces of pulverized ginger, 2 ounces of cream of tartar, and 2 pounds of sugar with 1½ gallons of water. When cold add a table-spoonful of yeast to the fluid, let it stand over night, then filter, and draw into bottles which should be well corked.

Spruce Beer. Put into a common soda bottle about 30 grains of bicarbonate of sodium, 10 drops of essence of spruce, and about 30 grains of crystallized tartaric acid. Fill the bottle quickly with spring water, cork, and secure the cork with twine or wire.

Another Receipt. Comminute the young sprouts of the spruce tree, then boil them with water until they turn yellow and the bark peels off easily. Add some toasted bread and malt, let the fluid ferment in the ordinary manner, and bottle. The proportions of the materials used are as follows: Ten gallons of water, 1¾ quarts of young spruce sprouts, ¼ pint of syrup (or, instead of the syrup, 1 pint of malt or ¾ pint of carrots), and some toasted bread and yeast.

English Spruce Beer. Comminute the young spruce sprouts, press out the juice, and boil it down to the consistency of syrup. Put the syrup in well-closed bottles, where in the course of time it will lose all taste of resin. When it is to be used dilute the necessary quantity with water and ferment with yeast.

LIQUORS AND BEVERAGES

Beer Brewing. The fabrication of beer is divided into three principal operations: 1. Fabrication of malt. 2. Preparation of the liquor containing the dextrine and sugar; and 3, the fermenting of this liquor.

1. *Fabrication of Malt* requires 3 operations: *a*, Steeping; *b*, Germinating (Couching); *c*, Kiln-drying.

a. Steeping. The barley is first uniformly moistened in the steeping-vat, and then covered with water 4 to 6 inches deep. The light grains floating on top are removed. During this operation carbonic acid is evolved, the water acquiring a yellowish color, while the barley absorbs water equal to about ⅛ of its volume, the increase in weight being more than ½. After 24 hours the water is drawn off and replaced by fresh, this being repeated 3 or 4 times according to the temperature of the air. The operation is finished if the grains can be crushed between the fingers without exuding in the form of a milky juice. In steeping, strict attention must be paid to avoid acid fermentation.

b. Germinating (Couching). The water being drawn off the barley is allowed to drain off and laid upon the couch floor of stone flags in heaps 5 to 8 inches high, and turned every 5 or 6 hours to insure an even temperature and uniform germination. The temperature of the heap should never be allowed to rise above 60° F. When germination begins the heap is piled up from 7 to 14 inches high. The temperature rises from 77° to 80° F., and the barley commences to sweat, which may be recognized, if, on thrusting the hand into the heap, it not only feels warm but gets bedewed with moisture. The radicles and acrospire begin to develop. The latter issues from the same end of the grain as the radicle, but turns over and proceeds within the husk towards the other end, and would there come forth as a green leaf were its progress not arrested. The malting, however, is complete before the acrospire becomes a leaf. As soon as the radicles and acrospire begin to grow, the barley, to admit air and check too rapid development, is spread thinner upon the floor, and turned over several times in the course of the day. As soon as the radicles have become 1¼ longer than the barley, and are contorted so that the grains hook into one another, and the acrospire is just beginning to push through, the barley is spread very thin on the floor, and when it feels no longer moist, brought into the kiln.

Kiln-drying expels the moisture from the germinated grains and converts the starch into dextrine and glucose, and stops the progress of germination and renders the mass fit for storage. The kiln is a chamber with a perforated iron or copper bottom to allow the heated air to permeate through the malt, which is spread upon the bottom about 3 to 4 inches deep. The temperature must not be too high at first, and is gradually increased to, but must never rise above, 158° F. During the kiln-drying the roots and acrospire of the barley become brittle and fall off, and are separated by a wire sieve. The barley, by germinating and kiln-drying, loses 8 per cent. of its weight.

2. *Preparation of the Liquor containing the Dextrine and Sugar (Mashing).* The object of this operation is to extract from the malt the sugar and dextrine by means of water, and to convert the starch into the same substances by the diastase. The beer, besides alcohol, must contain dextrine, and the action of the diastase must therefore be arrested before the dextrine is entirely converted into sugar, this being accomplished by boiling the watery solution. The operations necessary for gaining beer from the malt are: *a*, the actual mashing, or preparation of the wort; *b*, boiling the wort with hops; and *c*, cooling the boiled wort.

a. Mashing. The malt is coarsely ground in a grain-mill and mixed with water in a vat, and after 4 to 6 hours immersion, hot water is added to raise the temperature to 168° F., the vat covered, and the mash allowed to stand for 1 to 2 hours, when the clear wort (*wort-black*) is drawn off into a covered vessel and the residue washed several times with water.

b. Boiling the Wort with Hops. The clear wort is boiled in the copper together with the hops. The albumen and unchanged starch are precipitated by the tannin of the hops, and a bitter taste imparted to the beer and its durability augmented. After boiling for several hours the wort, to prevent acid fermentation, must be immediately cooled.

c. Cooling. In small breweries the beer is run into coolers, but in larger establishments refrigerators of various constructions are employed. The cooler is a large shallow vessel constructed of planks. It must be so placed that the wort can be cooled as quickly as possible to 60° to 68° F. In bringing the wort in the cooler the exhausted hops are retained by the hop-strainer.

d. Fermentation. When the wort is sufficiently cooled it is conveyed into the fermenting vat. Six or 8 hours after the yeast has been added fermentation becomes active. The temperature of the fermenting cellar should not rise above 59° F. A thin white froth appears first on the middle, and spreads gradually over the whole surface, whose color gradually changes into a yellowish-brown by the action of the air. Fermentation is finished in 5 to 8 days, according to the temperature of the cellar. After the beer is clear it is drawn off into barrels in the store-cellar for after-fermentation.

Improved Process of Brewing. The malt is mashed with water at 140 to 158° F. in a vat hermetically closed and provided with a stirring apparatus, double bottom, man-hole, etc., whereby the mash acquires a temperature of 120° F., which is raised to 167° F. by introducing steam at 257° F. between the 2 bottoms of the mash tun. The clear mash is then forced by steam from the grains into the clear mash-back standing higher than the mash tun. To dissolve the peptones, etc., the grains are steamed and then cooled off to 167° to 178° F. by squirting cold water over them, and the clear mash is then brought back into the mash tun in order to undergo a second complete saccharization. The mash is then heated to 212° F., and, after resting, forced into the hop-back.

New Brewing Process. The mash is thoroughly worked for 5 minutes in water at 120° F., and allowed to stand for 10 minutes. The supernatant liquor is then brought into the clarifying tun, and to every 25 gallons are added 1 pound of scalded hops and ½ ounce of carbonate of lime. The thick mash remaining in the copper is first heated to 145° F., and then to 170° F., and after saccharization is complete, boiled for 1 hour with an addition of 2¾ ounces of carbonate of lime to every 2000 gallons of mash; the liquor first drawn off from the thick mash is then added. After standing for ¼ hour the wort is pumped into the pan and boiled for 2 hours. The hops, previously boiled alone for 2 hours and cooled off to 190° F., are then added to the mash, cooled to the same temperature. The wort is then pumped into the cooler, where 2 to 2¾ ounces of carbonate of lime are added to every 2000 gallons.

To prevent fermentation and putrefaction of the albumen, ½ ounce of magnesia are added to every quart of the setting yeast.

Clarifying Beer. A very concentrated solution of phosphate of soda is first put into the wort, and then gypsum or chloride of calcium and slaked lime are added. Instead of the soda salt, phosphoric acid or some soluble phosphate of lime may be employed. This clarifier can be used at any stage of the process, either before or after fermentation. The same process is also recommended for other fermented liquors.

Flaxseed Pulp for Clarifying Beer. For every 60 gallons of beer boil ¾ pint of washed flaxseed in 1 gallon of water, replacing the water lost by evaporation by fresh. Separate the pulpy liquid from the seeds by straining and add it to the brewing ½ hour before mixing the hops with it. When the latter is added the flaxseed pulp coagulates, enclosing the substances which make the beer turbid and settling with them on the bottom of the boiler. Beer prepared in this way becomes clear in a very short time, its taste being not injured in any respect.

Brewer's Pitch. Light Yellow Pitch. Melt in an open iron boiler 100 pounds of pine pitch, and then add, with constant stirring, 5 to 6 pounds of caustic soda-lye of 10° B. When the mass in the boiler no longer rises, and the formation of bubbles has ceased, the fatty pitch is poured into iron moulds and allowed to cool.

Brown Pitch. I. Melt in an open iron boiler 150 pounds of pine pitch and 50 pounds of red, transparent American rosin; then add 10 pounds of rectified heavy rosin oil, stir thoroughly, and pour into moulds.

II. Composed of pine pitch 100 pounds, red, transparent rosin 85 pounds, and rectified heavy rosin oil 10 pounds.

III. Seventy-five pounds of pine pitch, 140 pounds of red, transparent rosin, and 12 pounds of rectified heavy rosin oil.

IV. Pine pitch 50 pounds, red, transparent rosin 150 pounds, and rectified heavy rosin oil 10 pounds.

V. Pine pitch 40 pounds, brown rosin 160 pounds, and rectified heavy rosin oil 10 pounds.

Ordinary Brown Brewer's Pitch. Melt in an open iron boiler pine pitch 30 pounds, brown rosin 175 pounds, and rectified heavy rosin oil 10 pounds.

Hop Pitch. Melt good brewer's pitch for ½ hour with 5 per cent. of hops, pass the mixture through a fine wire cloth, and finally add 0.01 per cent. of oil of hops. This pitch, it is claimed, contributes to make the beer durable and aromatic.

Glaze for Beer Barrels. Glazing beer barrels, being cheaper and better than pitching, is adopted in many large breweries. For this purpose dissolve ¼ pound of rosin, ⅛ pound of shellac, 1/16 pound of turpentine, and 1/16 pound of yellow wax in 1 quart of strong spirit of wine, and apply the solution twice to the inside of the barrel by means of a brush. As soon as the second coat is dry, apply one prepared by dissolving 1 pound of shellac in 1 quart of strong spirit of wine. This varnish closes the pores, does not break off nor injure the taste of the beer.

Prof. Artemus recommends to coat the inside of the barrel with a solution of soda water-glass of 1.25 specific gravity rubbed up with ⅛ of 1 per cent. of magnesia. This glaze is very cheap and, as it can only be dissolved by long continued boiling in water, allows of a thorough cleansing of the barrels.

Testing Beer for Foreign Bitter Substances. Heat about 2 quarts of the beer, to be examined over a water-bath until the largest part of the carbonic acid and about ¼ of the water are evaporated. To precipitate the bitter substances derived from the hops, compound the fluid, *while still hot*, with basic acetate of lead as long as a precipitate is formed. The richer the lead salt is in plumbic oxide the more readily will the hop constituents be removed. Filter off the precipitate of lead *as quickly as possible*, protecting it at the same time from the action of atmospheric carbonic acid, which would decompose it. Washing out the precipitate is not advisable. The excess of lead added in the filtered fluid is precipitated with the necessary quantity of sulphuric acid; a quick settling of the sulphate of lead is accomplished by an addition of about 40 drops of a solution of 1 part of gelatine in 20 of water before adding the sulphuric acid. The fluid, after it is again filtered, must, if the beer was unadulterated, have no bitter taste if a few drops of it are placed upon the tongue.

Now compound the fluid with sufficient ammoniacal liquor to neutralize all the sulphuric acid and a part of the acetic acid. Then evaporate it in the water-bath to ½ pint. To precipitate the dextrine, etc., mix the residue with 4 parts by volume of absolute alcohol, shake the mixture thoroughly, then place it in the cellar for 24 hours, and finally filter it. After distilling off the largest part of the alcohol, mix the aqueous residue of distillation, now reacting acid, successively with *petroleum-ether*, *benzole*, and *chloroform*. Then add ammonia to the aqueous fluid until it shows a perceptible alkaline reaction, and then repeat the shaking with the three fluids in the order given.

Pure Beer prepared from malt and hops shows, if treated in this manner, the following action:

Acid Mixtures. Petroleum-ether.[*] The solid part obtained by evaporating the residue of the mixture with petroleum-ether has scarcely any bitter taste, and when dissolved in concentrated sulphuric acid[†], in sulphuric acid and sugar, or in nitric acid, gives a very slightly yellowish-colored solution, and in concentrated hydrochloric acid almost a colorless one.

Benzole[‡] withdraws only very small quantities of a resinous substance, which acts towards the mentioned acids in a similar manner as that isolated by the petroleum-ether. This substance has also only a slightly bitter taste.

Chloroform acts similar to benzole.

Ammoniacal Shakings.[§] *Petroleum-ether* absorbs next to nothing.

Benzole withdraws only traces of a substance giving no characteristic reaction of color.

Beer Wort acts in the same manner as fermented beer.

By the same method the addition to the beer of the following 13 substitutes for hops can be shown.

1. *Wormwood.* On shaking the acid fluid with petroleum-ether, ethereal oil is found, which is recognized by its odor and a part of the bitter substance. The residue of evaporation gives a brown solution in concentrated sulphuric acid, which, on being allowed to stand in the moist air of a room, assumes a violet color. Compounded with sulphuric acid and a little sugar it acquires gradually a red-violet color. By dissolving a part of the evaporated residue in a little water the filtered solution reduces ammoniacal solution of silver, while precipitates are obtained with chloride of gold and potassium mercuric iodide, but only slight turbidity with tannin, potassium bromide, potassium iodide, and mercurious nitrate.

Benzole and *Chloroform* absorb also the bitter substance which reacts as described above.

2. *Marsh Rosemary* (*Sedum palustre*). In the extract with petroleum-ether some ethereal oil having the characteristic odor of marsh rosemary is found. The small residue treated with concentrated sulphuric acid acquires a more brownish color than ordinary beer, but for the rest does not remarkably differ from it.

Benzole and *Chloroform* absorb amorphous substances of a bitter taste, which give dark red-violet solutions with sulphuric acid and sugar, and, on being boiled in dilute sulphuric acid (1.10), develops an odor of *ericinol*. The solution reduces chloride of gold and alkaline solution of copper, while a precipitate is obtained with potassium iodide and tannin, but not with basic lead acetate. Benzole also absorbs small quantities of a substance which reduces ammoniacal solution of silver. Chloroform absorbs a substance which is precipitated with potassium-mercuric iodide.

3. *Bog Bean, Marsh Trefoil* (*Menyanthes trifoliata*). In the extract with petroleum-ether only traces of the bitter substance are found. *Benzole* and *chloroform* absorb more of the bitter substance (*menyanthin*), the taste of

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[*] Should boil between 91.4° and 140° F.

[†] The sulphuric acid should be as free as possible from nitric acid.

[‡] Benzole boiling at 176° to 177.8° F., and previously rectified, must be used.

[§] Before making the fluid alkaline it must be once more mixed with petroleum-ether, in order to remove all traces of chloroform.

which can be detected in the evaporated residue. The latter, on being heated with dilute sulphuric acid (1.10), develops also the characteristic odor of *menyanthol*, reduces ammoniacal solution of silver, and is precipitated or, at least, made turbid with potassium-mercuric iodide, potassium iodide, tannin, and chloride of gold.

Nothing characteristic is found on shaking with ammoniacal liquor.

4. *Quassia.* Petroleum-ether absorbs but very small traces of the exceedingly bitter quassiin, which does not differ by any other reaction from substances obtained from pure beer. Larger quantities of quassiin are isolated by benzole and especially by chloroform. When treated with sulphuric acid and sugar it acquires a pale reddish color, reduces slightly ammoniacal solution of silver and chloride of gold, and precipitates potassium-mercuric iodide, potassium iodide, tannin, and basic lead acetate.

5. *Colchicum Seeds.* Petroleum-ether yields substances similar to those isolated from unadulterated beer. *Benzole* absorbs small quantities of *colchicin* and *colchicein*, which taste bitter and give a yellow solution with concentrated sulphuric acid, which, on saltpetre being added, acquires a violet, blue, and later on a green color. The last reaction of color being also obtained with nitric acid of 1.30 specific gravity. By adding to the solution in nitric acid, when it has ceased to throw up bubbles, caustic potash, until a strong alkaline reaction takes place, a very durable cherry to dark-red coloring is obtained. *The chloroform residue* yields larger quantities of the above constituents of the meadow saffron, so that, besides the above-mentioned color reactions, precipitates are obtained with the alkaloid reagents commonly used.

6. *Indian Berries* (*Cocculi Indici*), *Petroleum-ether*, and *Benzole* absorb from the beer adulterated with Persian berries only such constituents as from pure beer. With *chloroform* and, still easier, with *amyl alcohol* the picro toxin is withdrawn from the fluid, but, on evaporating, it remains behind generally in such an impure state that it cannot be directly used for color reactions. It is therefore best to test whether a part of the residue reduces an alkaline solution of copper, and another part, dissolved in water, has a poisonous effect upon fishes. In this case, re-dissolve the remainder of the residue in warm water, shake again with chloroform, and repeat this until the residue of the chloroform shakings appears crystalline, after having been allowed to evaporate spontaneously in the ordinary temperature of a room. On re-dissolving the residue in alcohol, and allowing it to evaporate slowly, large needle-like crystals should remain behind, which give a yellow solution in concentrated sulphuric acid. By mixing this solution intimately with 5 to 6 parts by weight of pulverized saltpetre, then moistening it with sufficient pure, concentrated sulphuric acid to form a plastic mass, and finally adding soda-lye of 1.3 specific gravity until a strong alkaline reaction takes place, a brick-red fluid is obtained.

7. *Colocynths.* The *colocynthin* does not pass into *petroleum ether* and *benzole*, but is shaken out with *chloroform*. It is extremely bitter, is precipitated from an aqueous solution with tannin, reduces alkaline solution of copper, and dissolved in sulphuric acid gives a red solution, and in *Fröhde's* reagent[*] a violet one. But the latter reactions succeed only after the colocynthin has been purified by repeated dissolutions in water and shaking with chloroform.

8. *Willow Bark.* The *salicin* found in the young bark of several species of willow and poplar cannot be well obtained from acid extracts with *petroleum-ether*, *benzole*, and *chloroform*, but easily so with amyl alcohol. On heating the salicin with potassium bichromate and dilute sulphuric acid (1.4), it emits the odor of *salicylic acid*. In concentrated sulphuric acid it gives a red solution, and in *Fröhde's* reagent a violet-red one; but both reactions succeed only when the salicin is very pure, which is difficult to obtain even by repeated dissolutions in water and shaking the filtered solutions with amyl alcohol.

9. *Strychnine* cannot be gained from the acid solution, but only from the ammoniacal fluid, and then only in small quantities with *petroleum-ether*, and somewhat less difficult with *benzole* and *chloroform*. To establish the alkaloid it is best to use its well-known reaction upon sulphuric acid and potassium bichromate.

10. *Atropin* and

11. *Hyoscyamin* are also obtained by shaking the ammoniacal solution with *benzole* and *chloroform*. They are precipitated with most reagents upon alkaloids, but, as good color reactions are wanting, must be confirmed by physiological tests.

The process is modified for proving.

12. *Aloes.* By treating the beer, in preparing it for the test, only with *neutral* lead acetate, and shaking it later on with amyl alcohol. After evaporation a residue with the characteristic taste of aloes must remain, and which yields precipitates with potassium bromide, basic lead acetate, and mercurious nitrate, and, being heated, reduces alkaline solution of copper and solution of gold. Tannin must also precipitate it, but, on being added in excess, partly redissolves the precipitate. By boiling a part of the residue with concentrated nitric acid, and expelling the latter over a water-bath, a mass remains which, on being heated with caustic potash and potassium cyanide, acquires a blood-red color.

13. *Gentian Root.* The beer is also prepared for this test by treating it with neutral lead acetate, filtering and removing the excess of lead, with just the necessary quantity of sulphuric acid. The fluid is then evaporated to the consistency of syrup, and this acidulated with nitric acid, and then subjected to the process of dialysis. The neutralized dialysate is again precipitated with neutral lead acetate, then filtered, and the filtrate compounded with basic lead acetate, whereby the bitter principle of gentian root (*gentianin*) is precipitated. The precipitate, after filtering and washing, is decomposed with sulphide of hydrogen, and the filtered fluid shaken with *benzole* or *chloroform*. By adding ferric chloride to an aqueous solution of gentianin it will be colored brown, but is not precipitated by it. Gentianin reduces ammoniacal solution of silver and alkaline solution of copper. It is precipitated with potassium bromide and mercurious nitrate, chloride of gold, and phosphomolybdic acid, while corrosive sublimate and potassium-mercuric iodide cause turbidity.

Determination of Glycerine in Beer. For Dark Beers. Evaporate carefully in a water-bath, at about 165° F., 6 fluid ounces of beer and 1½ drachms of magnesium hydrate. Rub the residue before it is entirely dry with 3 fluid ounces of absolute alcohol, then filter off the alcohol and wash the residue with 3 fluid ounces of alcohol. Then compound the filtrate with 3½ times its volume of absolute ether in order to separate the maltose and parapepton, and then allow the filtrate to stand for 12 hours for the volatilization of the ether. Place the remaining alcoholic solution in a flask previously weighed, evaporate it to a syrup on the water-bath, and dry it in a rarefied space for 12 to 24 hours. Extract the residue with about 1 fluid ounce of absolute alcohol, free the fluid by filtering from the separated cholesterin, malt fat, etc., wash it with ½ fluid ounce of absolute alcohol, and evaporate the filtrate over the water-bath, then dry it under the air-pump and weigh it as glycerine.

For Light Beers, poor in peptones, take up the mass thickened with magnesium hydrate with absolute alcohol, filter, evaporate the filtrate to a syrup, dry it under the air-pump, add a mixture of 1 part of absolute alcohol and 1 part of ether, stir vigorously with a glass rod, filter through a very small filter, wash with the same mixture, evaporate carefully, and finish the process under the air-pump.

Alcohol and Compressed Yeast from uncrushed Cereals without the Use of Steam Pressure. Acidulate 50 gallons of water with 2 ounces of pure sulphuric acid of 66 per cent., and in it soak 20 pounds of the cereals without being crushed, at a temperature of about 104° F. After soaking for 48 to 60 hours the material is brought together with the water into the preparatory mashing tun, which is provided with a mashing machine, and saccharization takes place at 140° F.

To Convert Alcohol of 70 per cent. into 90 per cent. in the Cold Way. Mix calcined potash with alcohol of 70 pe cent. until the phlegm, when shaken, shows 80 per cent.; then pour the alcohol carefully into another vessel, and add potash until it shows 90 per cent. Then pour it into a third vessel, and to cleanse it, which will require about 1 hour, add some more potash, and some burnt alum. The potash before using it, must be pulverized, sifted, and calcined in an iron vessel.

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[*] 0.15 grains of sodium molybdate dissolved in 40 drops of pure concentrated sulphuric acid.

To Purify Alcohol obtained from Beets and Molasses. The alcohol is brought into a vessel of galvanized iron or enamelled wrought iron. For every 20 gallons of alcohol of about 90 per cent., 2 to 2½ ounces of caustic potash are added. The mixture is allowed to stand quietly for about 1 hour, when it is thoroughly stirred and the agitation repeated every 12 hours during the first 24 hours. After standing quietly for 12 hours, 10 per cent. of water is added, and the agitation repeated every 12 hours during the next 36 hours. It is then allowed to rest for 24 hours, and filtered through a layer of asbestos. The potash is next neutralized with tartaric acid. After stirring it and then resting for 12 hours about 2 gallons of water are added to every 20 gallons of alcohol. The liquid is again allowed to rest for 12 hours, and filtered before rectifying.

To Purify Alcohol. The process consists in adding a small quantity of nitrate of silver to the crude alcohol, ¾ to 1¾ ounces being required for 2000 gallons of crude alcohol, according to quality and strength. For practical use it is best to prepare a solution of 10 parts of nitrate of silver in 100 of water. After the alcohol has been mixed with the solution it is converted into high-proof spirits. Rectified spirit produced by this process is destitute of all bad odors to a degree not otherwise attainable. The invention is available with equal success for any kind of spirit of wine; an addition of but 7 grains of nitrate of silver to 100 gallons of spirit of wine being sufficient to remove the bad odors from the poorest quality coming into commerce. For practical use it is best in these cases also to prepare solutions of nitrate of silver in water, namely, for the first, 1 part of nitrate of silver to 100 of water, and for the last, 1 part of nitrate of silver to 1000 of water.

To Prepare Absolute Alcohol. The easiest way of accomplishing this is to pour strong alcohol over anhydrous sulphate of copper, and agitate as long as the salt is colored blue, and then distil the fluid.

Manufacture of Cognac. The process in the *Cognac* district is as follows: The wine to be distilled is first brought into a stone trough, and is then pumped into a bronze boiler called the "chauffe-vin," whence it can flow into a still. In the chauffe-vin and in the retort the wine is heated by a coal fire, at first strongly and then gradually weak. After a short time a white, generally transparent, liquor called "*broullis*," which should amount to about ⅛ of the quantity of wine brought into the chauffe-vin, begins to run from the mouth of the cooling-pipe. The brown fluid, containing but very little alcohol, which remains in the retort is emptied and thrown away. Fresh wine is then conveyed into the chauffe-vin, and the distillation commences anew, and is continued day and night until all the wine has been converted into spirits, which is finally rectified.

Artificial Cognac. The following compound, after storing for some time, will closely resemble the genuine article in taste and aroma: I. Mix 10 ounces of acetic acid, 7 ounces of *spiritus nitricoœthereus*, 1¾ gallons of white French wine, ¾ pint of tincture of oak bark (extracted from 4 ounces of oak bark), and 30 gallons of spirit of wine of 55 to 60 per cent., and the requisite quantity of sugar color.

II. *Artificial Cognac of a very fine flavor* is obtained by mixing 2400 parts of alcohol of 90 per cent., 1600 of water, 8 of *spiritus nitricoœthereus*, 6 of aromatic tincture, 1 of acetic ether, and 2 of tannin. The mixture, after standing for some time, is filtered, and should have a specific gravity of 0.917 to 0.920.

Dutch Method of Distilling and Manufacture of Compressed (Dry) Yeast. At *Schiedam*, *Rotterdam*, and *Delfshaven* are 300 to 400 distilleries and manufacturers of compressed yeast. The arrangement of all the distilleries is nearly the same. The stills and refrigerator stand on 1 side, and on the other 2 rows of vats, 6 in each row. Some of the vats are covered; on lifting the cover of one in which the mash has ceased fermenting, a thin, mouldy coat will be found on the surface; by tasting the mash and dipping the finger a few inches into it, no particles of crushed malt will be detected.

The capacity of the vats is nearly the same in all distilleries, and 3 to 4 men are employed in each. Work in all distilleries commences at 4 o'clock in the morning and ceases at 5 o'clock in the afternoon. The Dutch method of distilling requires comparatively little labor, which is generally done by hand, steam-engines being seldom used, and then only for pumping water. The greatest cleanliness prevails in the distillery; the walls, brickwork of the stills, etc., being frequently painted, so as to give them always a new appearance.

1. The mash is brought into fermentation with compressed yeast.
2. Considerable of the mash of former distilling is utilized.
3. No sulphuric acid is used. The mash is distilled, *a*, into low wine, and, *b*, by repeated distilling of the low wine into gin (the receipt for which will be given later on).

In Schiedam, 4 vats, each having a capacity of about 500 gallons, are usually mashed every day with 250 pounds of crushed rye and 150 pounds of crushed malt; a total of 400 pounds of groats.

Mashing. At 4 o'clock in the morning water is boiled in 1 of the stills. The groats having been poured into the mashing vat, the mashing water, consisting of 7 kannen* of cold and 21 kannen of warm water, is carried into the vat by 3 workmen, while the foreman manipulates with a kind of mashing scoop. When the mashing is finished, each vat contains about 175 gallons. A thermometer is seldom used for determining the temperature of the mash. The mash is allowed to stand quietly for saccharization for 1½ to 2 hours.

Setting (Anstellen). About 7 o'clock A. M. 230 gallons of wash are put into the fermenting vat, next yeast, and finally 40 gallons of cooling water, its temperature depending on that of the wash, leaving 4 inches (37 gallons) for rising space. Recapitulation of quantity of mash: One hundred and seventy-five gallons of mash, 230 gallons of wash, 40 gallons of water, 37 gallons of rising space; 482 gallons.

It will be seen from the foregoing how little labor is actually required, as only one man mashes lightly by hand, and cooling apparatuses being superfluous, as sufficient cold water and wash are added to the mash.

The mash, after having been set at 9 o'clock A. M. at 81.5° F., is allowed to ferment until 12 o'clock, during which time a thin white coating of froth is formed on the surface.

The wort from the mash in the 4 tuns is then pumped into a wort-back resembling a square wooden cooler, and standing on an elevation in the fermenting room. In place of a perforated bottom to separate the grains from the wort, the Dutch distillers use a silghtly serpentine copper siphon about 30 inches long, 4 inches wide on the top. In one of the staves of the vat, about 10 inches above the bottom, which has a fall forward of about 1 inch, is a hole closed with a cork. This latter is removed by pushing the lower pointed end of the copper siphon through the hole from the inside of the vat, allowing it to project about ¾ inch. To the upper end of the siphon is fastened a strap, which is drawn over the edge of the vat by a stone. The stone is as heavy as the copper tube full of thin mash. By raising the stone somewhat, the upper end of the copper siphon sinks down, sucks in the thin mash, and carries it through the lower end projecting through the hole in the vat, into a collecting back. When all the thin mash down to the exhaust has run off, the stone is raised up a little more and the operation repeated. All the wort is drawn off from the mash in this manner, that of the four vats running at the same time through a gutter into a collecting back, and is from here pumped into the above-mentioned wort-back. The froth (scum) formed from the time of setting (anstellen) to drawing off of the wort (9 to 12 o'clock) is prevented from entering the siphon with the thin wort, by placing a lath across the surface of the wort. When the principal part of the wort has been drawn off, water is poured upon the mash remaining in the vat and thoroughly mixed with it. It is allowed to stand quietly for 2 or 3 hours, when the heavier particles of the grains will have settled on the bottom, and the operation of drawing off the wort is repeated. About 160 gallons of sediment, *i e.* thick mash, remain in the vat after all the wort has been drawn off. The wort stands about 4 inches deep in the wort-back, which has a total height of about 12 inches; it remains here until the next morning, when the yeast is ripe.

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* One kanne = 4.4 gallons; 28 kannen being used. The total quantity of water in each tun is about 125 gallons. (W. T. B.)

The formation of yeast is as follows: The yeast separates not as a high froth, but as a brownish mass resembling the formation of cream upon milk. Dark places are frequently observed upon the surface of the wort, but generally it is of a light-brown color; the lighter the color the better is the fermentation, and also the yeast. When the yeast is ripe the wort is brought back into the respective fermenting tuns. As there is also a sediment of yeast on the bottom, in order to retain this a ring is placed around the tap-hole, the top yeast being held back by a lath placed across the surface of the wort. When all the wort has run off a hose is tied to the tap-hole and a workman sweeps the ripe yeast into the precipitating vessels. These are circular in form and about 15¾ inches high. The yeast, after remaining here for 3 to 4 hours, can be pressed without much difficulty, although only very little water, and that but once, and no starch has been added to precipitate it.

For pressing the yeast a canvas bag is put inside a stout press bag, and this into another press bag. The yeast is poured into this triple bag, the canvas bag containing the grains being finally lifted out. How much easier the Dutch distiller removes by this process the particles of groats from the yeast, than by washing and sifting it, as is customary in the distilleries of other countries. To press the yeast uniformly dry the press bag is not tied, but the bags, which are square, are placed one on the top of the other, the open end of the bag being bent upwards and secured between the bag itself and that lying on the top of it, a piece of linen being, for further security, laid around the open end of the bag. As 6 press bags are laid on top of each other, considerable yeast can be quickly pressed dry with one press.

The setting (stell) yeast, preserved in a fluid state, is compounded with hop water. One gallon of hops is distilled off, and the extract used for preserving the yeast required for 16 washings.

Clarifying the Wash. The wash runs directly from the still into a brick pit, and clarifies here while still warm, there being but a small opening in the cover of the pit for carrying off the vapors. About ⅔ of the clarified wash is pumped the next morning into a cooler lined with copper, and used the third day for cooling off the mash. As soon as the wash has been drawn off into the respective fermenting tuns the cooler is at once cleansed and the wash to be used the next day pumped up.

Receipt for Holland Gin. For a distillate of 12 mashings about 20 gallons of juniper berries are used; for the finest qualities of gin some licorice root and sugar are added in rectifying.

The fine flavor is imparted to the gin by the proportion of malt to the crushed rye, and the finished liquor being rectified three times. In a few distilleries 20 gallons of barley are used in place of the same quantity of rye.

Rum (*Façon Rum*). Prepare first a so-called rum body by pulverizing 10 pounds of catechu, placing the powder in a wide-necked bottle, pouring 1¾ gallons of alcohol of 96 per cent. over it, and letting the mixture stand for 8 days, stirring it frequently until the supernatant alcohol has acquired a dark-brown color, while the sediment has become light brown. Then pour the clear fluid into a demijohn. On the other hand, boil 45 pounds of St. John's bread, as fresh as possible, and 10 pounds of large raisins with 4½ gallons of water for about 25 minutes and press out the liquor. Mix this with 1¾ gallons of alcohol, pour it into the demijohn, stir thoroughly and allow the whole to settle. Take 1¾ to 3 quarts of this rum body to every 130 gallons of alcohol, and flavor the mixture with 1½ to 1¾ pounds of Kingston rum essence to every 20 gallons.

To Destroy Fusel Oil (*Amyl Alcohol*). Every distillate, be it from grain or potato mash, contains more or less fusel oil, which, by its disagreeable odor and taste, injures the flavor of the liquor, and, in preparing cordials, liqueurs, etc., destroys the effect of the aromatic admixtures. The best means hitherto discovered of depriving liquors of fusel oil is to pass them through coarsely-pulverized charcoal, distributed as follows in a series of casks. Each vessel must have a double bottom, the false one being perforated and placed a few inches above the true. Upon this perforated board a layer of chopped, lixiviated straw ¾ to 1 inch thick is laid, and over the straw a stratum of fine gravel the size of large peas. This is covered with a pretty thick stratum of the charcoal, previously freed from dirt and dust by washing; upon this is spread a piece of close canvas, and pressed down by a thin bed of river sand. The cylinder or cask should be filled with these successive layers to within 2 inches of its top, and is then closed air-tight. Immediately below the head a hole is bored in the side for receiving an overflow tube, which is either screwed rectangularly to another elbow pipe or is bent so as to enter tight into a hole beneath the false bottom of the second cylinder or cask. In this way the series may be continued to any desired number of vessels; the last discharging the purified spirit into the store-barrel. The foul alcohol must be made to flow into the bottom space of the first cylinder down through a pipe in communication with a charging vessel, placed upon such an elevation as to give sufficient pressure to force the spirits up through the series of filters, the supply pipe being provided with a regulating stop cock.

To Purify Alcohol and Liquors. Cover 10 pounds of animal charcoal with a few inches of water, add 1¾ ounces of concentrated sulphuric acid, agitate the mixture thoroughly, and let it stand over night. Draw off the water the next day, and wash the mixture with fresh water until the latter has no longer an acid taste and does not redden litmus paper. The drained-off charcoal is then placed upon the perforated bottom of the filtering apparatus, covered with a layer of lixiviated straw ¾ to 1 inch thick. Upon this is placed another perforated bottom, and upon this a mixture of 1 pound of magnesia, 20 pounds of wood charcoal, and 5½ pounds of pyrolusite. This is also covered with a layer of lixiviated straw and a finely-perforated plate upon which comes a thick layer of river sand previously washed and dried. The liquor to be purified is then compounded with ¾ ounce of spirit of ammonia to every 20 gallons. The liquor is allowed to remain quietly for a few days and is then gradually passed into the filter, where it remains for 3 days, when the purified liquor is drawn off and the filter replenished. This apparatus may be used for an entire year without renewing the filtering material.

To Remove the Taste of the Barrel from Whiskey, add a little good olive oil to it.

WINES. *Bordeaux.* It is best to use a light Hungarian red wine. Mix with 50 gallons 1 pint of kino, 2 to 3 ounces of sulphate of iron dissolved in 1 quart of boiling water, and 1 wine-glassful of extract of orris root and a like quantity of raspberry extract.

Burgundy. Mix in a barrel 100 parts of white wine, 10 of the juice of black cherries, 6 of crushed large raisins, 6 of pulverized cinnamon, ½ of pulverized crude tartar, and 50 of must concentrated by evaporation; allow the mixture to ferment in a cool place, and then rack the wine into another barrel.

Champagne. The following process of manufacture is observed in champagne: Late in the fall the must of different grapes is brought and poured in large vats. In December, before fermentation is entirely completed, the wine is clarified with isinglass and racked into well-stoppered bottles. The bottles are then laid on their sides with their mouths sloping downwards at an angle of about 20 degrees, in order that any sediment may fall in the neck. At the end of a few days the inclination of the bottles is increased, and the slimy substances collected over the cork are from time to time dexterously discharged by a skilled workman opening the bottles. Every time the bottles are opened, 1 teaspoonful of rock-candy is added to each bottle. When no more sediment is collected in the neck, the bottles are corked with long corks by special machines, and wired.

Artificial Champagnes. Champagne Liqueur. Boil 8¾ pounds of the finest loaf sugar with 1 gallon of water, add gradually while the water is boiling ½ gallon of alcohol of 90 per cent., and then filter the mixture.

The above liqueur is added to all the following compounds.

Chandon et Moet (*Green Seal*). Mix the above liqueur with 7½ gallons of white wine and 1 quart of cognac.

Louis Röderer (*Green and Bronze Seal*). Mix the champagne liqueur with 7½ gallons of white wine, 1 bottle of cognac, and 4 drops of sulphuric ether dissolved in cognac.

Heidesick et Cie. (*Sealed with Tinfoil*). Mix the champagne liqueur with 7½ gallons of white wine and ¾ pint of cognac.

Lemberg Geldermann et Deittz (*Sealed with Tinfoil*). Mix double the quantity of champagne liqueur with 7½ gallons of white wine and ¾ pint of cognac, in which 2 roots of celery, carefully cleansed, have been previously digested for 4 hours.

Schneider (*Yellowish-green Seal*). Mix the champagne liqueur with 7½ gallons of wine, 1 bottle of cognac, and 3 drops of strawberry essence.

Fleuer de Sillery (*Sealed with Tinfoil*). Mix the champagne liqueur with 7½ gallons of white wine and 1 bottle of cognac, in which 4 roots of celery have been previously digested for 8 hours.

Jacquesson et Fils (*Sealed with Tinfoil*). Mix the champagne liqueur with 7½ gallons of white wine and 1¾ pints of cognac.

The bottles are corked with champagne corks and laid on their sides with their mouths sloping downward. They are recorked the next day with the corking machine. The corks, before using them, must be laid in hot water, and before placing them in the machine, moistened with sugar syrup, and as soon as driven into the bottles tied with cord, and finally wired.

Madeira. Digest at a moderate heat 10 ounces of purified honey, 13 ounces of the strongest spirit of wine, ½ ounce of hop tops, and 3 quarts of French wine, then add ½ ounce of tincture of burned sugar, and filter the wine into bottles.

Malaga. Put 15 gallons of white *calabre* (white-wine must boiled down to ½ of its volume), 7 gallons of red *calabre* (red-wine must boiled down to ¼ of its volume), 2 gallons of spirit of wine, and 1 wineglassful of *essence de Goudron* dissolved in spirit of wine in a barrel; fill the barrel full with light white wine, and let it remain in a warm room about 4 to 6 weeks. Then color the wine with sugar color, but not too brown, and finally clear it with isinglass.

The *essence de Goudron* is prepared by allowing 1 pound of Swedish wood tar to stand for a few weeks with 1¾ pints of spirit of wine, shaking it frequently, and finally drawing off the supernatant liquor.

Port Wine. Compound 100 gallons of old red wine with 10 to 15 per cent. of pure honey, and let the mixture ferment slowly in a warm room. When the sweet taste has almost disappeared, add 4½ gallons of spirit of wine previously mixed with 2 quarts of kino. Should the wine not be dark enough, add some heavy red wine, or color with mallow blossoms.

To Improve Wine Must. Pulverize pure common salt, calcine it in a pan, and distribute it in the barrels in the proportion of ¼ ounce of salt to 15 gallons of must.

A Remedy for Ropiness or Viscidity of Wines is the bruised berries of the mountain ash in a somewhat unripe state, of which 1 pound, well stirred in, is sufficient for a barrel. After agitation the wine is left at rest for a day or two, and then racked off into another barrel, and finally cleared and bottled

To Remove the Taste of the Barrel from Wine is best accomplished by agitating the wine for some time with a spoonful of olive oil. An essential oil, the chief cause of the bad taste, combines with the fixed oil and rises with it to the surface.

◆

Pointers.

STOCK FOR A FIRST-CLASS BAR.

* * * *

FINE LIQUORS,
OLD WHISKEYS,
CHOICEST WINES,
FRENCH CORDIALS,
IMPORTED AND DOMESTIC ALE, BEER AND STOUT,
BROMO SELTZER,
FINE OLD COGNAC,
IMPORTED AND DOMESTIC SODA,

A SELECT VARIETY OF SOFT DRINKS,
PURE AND POTENT SELTZER,
SCHROEDER'S, ANGOSTURA AND BOKER'S BITTERS,
THE MOST APPROVED SELECTION OF
SEASONING SPICES,
TROPICAL FRUITS,
AND THE USUAL PURE SYRUPS, ESSENCES ETC.

SCIENTIFIC AMERICAN CYCLOPEDIA

BITTERS

Bitters.—Bitters are considered as tonic and stomachic, and to improve the appetite when taken in moderation. The best time is early in the morning, or an hour before meals. An excessive use of bitters tends to weaken the stomach. They should not be taken for a longer period than a fortnight at one time, allowing a similar period to elapse before again having recourse to them.

Angostura.—4 oz. gentian root; 10 oz. each calisaya bark, Canada snake root, Virginia snake root, licorice root, yellow bark, allspice, dandelion root, and Angostura bark; 6 oz. cardamom seeds; 4 oz. each balsam of tolu, orangetis, Turkey rhubarb, and galanga; 1 lb. orange peel; 1 lb. alkanet root; 1½ oz. caraway seed; 1½ oz. cinnamon; ½ oz. cloves; 2 oz. each nutmegs, coriander seed, catechu and wormwood; 1 oz. mace; 1¼ lb. red sanders wood and 8 oz. turmeric. Pound these ingredients and steep them for fifteen days in 50 gal. proof spirit; before filtering, add 30 lb. honey.

Aromatic. — Macerate 2¾ lb. ground dried small orange apples; ¼ lb. ground dried orange peel; 2 oz. ground dried calamus root; 2 oz. ground dried pimpinella root; 1 oz. ground dried cut hops, for fourteen days, with 10 gal. of spirit at 45%; press, and add 2½ pt. brown sugar sirup. Filter. Color dark brown.

Berlin Bitters.—Dissolve in 3 qt. 80% alcohol Tr., 40 drops oil of juniper, 40 drops oil of coriander, 20 drops oil of angelica, 20 drops badian seed oil, 22 drops oil of ginger; add 3 qt. of water and ½ lb. of sugar to this solution. Filter and color brown.

Boker's.—1½ oz. quassia; 1½ oz. calamus; 1½ oz. catechu, powdered; 1 oz. cardamom; 2 oz. dried orange peel. Macerate for ten days in ½ gal. strong whisky, and then filter and add 2 gal. water. Color with mallow or malva flowers.

Brandy.—Grind to coarse powder 3 lb. gentian root, 2 lb. dry orange peel, 1 lb. cardamom seeds, 2 oz. cinnamon, 2 oz. cochineal. Infuse ten days in 1 gal. brandy, 8 gal. water, and filter.

Hamburg.—Grind to a coarse powder 2 oz. agaric, 5 oz. cinnamon, 4 oz. cassia buds, ½ oz. grains of paradise, 3 oz. quassia wood, ¾ oz. cardamom seeds, 3 oz. gentian root, 3 oz. orange apples dried, 1½ oz. orange peel. Macerate with 4¼ gal. 95% alcohol, mixed with 5¾ gal. water; add 2¾ oz. acetic ether. Color, brown.

Hostetter's.—The following is given as the composition of Hostetter's bitters: Calamus root, 2 lb.; orange peel, 2 lb.; Peruvian bark, 2 lb.; gentian root, 2 lb.; Colombo root, 2 lb.; rhubarb, 8 oz.; cinnamon, 4 oz.; cloves, 2 oz.; diluted alcohol, 4 gal.; water, 2 gal.; sugar, 2 lb.

Orange. — Macerate 6 lb. orange peel for twenty-four hours with 1 gal. water, cut the yellow part of the peel from off the white, and chop it fine; macerate with 4¾ gal. 95% alcohol nutmeg, and 75 cayenne pepper seeds. Infuse them, well bruised, in 8 gal. proof spirit, for fifteen to twenty days, stirring every day. Draw off and filter.

Spanish.—Grind to coarse powder 5 oz. polypody, 6 oz. calamus root, 8 oz. orris root, 2½ oz. coriander seed, 1 oz. centaurium, 3 oz. orange peel, 2 oz. German chamomile flowers; then macerate with 4¾ gal. 95% alcohol, and add 5¼ gal. water and 1½ oz. sugar. Filter and color brown.

Stomach.—Grind to a coarse powder ½ lb. cardamom seeds, ⅛ lb. nutmegs, ¼ lb. grains of paradise, ½ lb. cinnamon, ¼ lb. cloves, ¼ lb. ginger, ¼ lb. galanga, ¼ lb. orange peel, ⅛ lb. lemon peel; then macerate with 4¾ gal. 95% alcohol, and add a sirup made of 4½ gal. water and 12 lb. sugar; filter.

Wild Cherry.—Wild cherry bark, 4 lb.; squaw vine (partridge berry), 1 lb.; juniper berries, 8 oz. Pour boiling water over, and let stand for twenty-four hours; strain, and again pour boiling water on the ingredients; let macerate for twelve hours, then express and filter through paper, so that the whole will make 5 gal., to which add 3½ lb. of sugar, 1½ gal. molasses, 6 oz. tincture of peach kernels, 3 oz. tincture of prickly ash berries, 2 qt. alcohol.

Wine.—1. Bruised gentian root, fresh orange and lemon peel, of each 1¼ oz.; white wine, 1 qt.; digest for a week, and strain.

2. Cinchona bark bruised, 8 oz.; white canella, 1½ oz.; juniper berries, lemon peel, and winter's bark, of each 1¼ oz.; carbonate of soda, ¾ oz.; Madeira wine, 1¾ gal.; digest for a week.

3. French lemon peel, 1 lb.; dried orange peel, ½ lb.; bruised gentian root, ¼ lb.; Cape wine, 1 gal.; as before.

CIDER

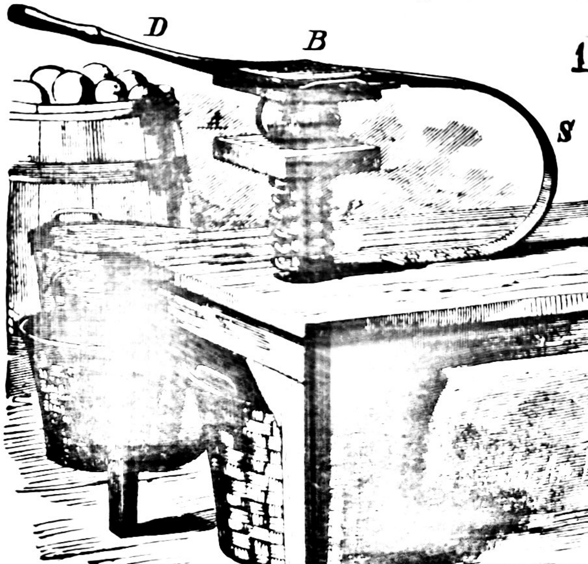
Cider.—*How to Make Good Cider and to Keep It.*—In localities where the apple crop is abundant the preparation of cider for market is a profitable industry when intelligently undertaken, and there are few beverages more palatable and less harmful than cider when properly prepared. Unfortunately, there are few farmers who really know how to make good cider or how to care for and keep it when made.

In the first place, apples not perfectly sound and well ripened are not fit for making cider. The russet is one of the best of apples for this purpose, but other and more commonly available varieties need not be slighted.

To prevent bruising the fruit intended for the cider press should always be hand picked. After sweating each apple should be wiped dry, examined, and any damaged or decayed fruit thrown out and used for making vinegar cider.

In the grinding or pulping operation the seed is often crushed and is apt to taint the juice, so that despite the loss and extra time required it is always better to core the apples before grinding them, as the cider will not only taste and look better, but keep better. A cheap and handy coring machine is shown in Fig. 1. In this the coring tube, which may be of tin, free from iron rust, projects through a common bench or table, and is surrounded by an ordinary furniture spring, P, which supports a piece of wood, A. This has a hole in the center of it, over and partly into which the apple is placed. The lever, D, on which the piece of wood, B, similar to A, but having an aperture only large enough to admit the coring tube, is loosely hung by side pins, is held in position by the spring, S. The operation of the machine will be readily understood by referring to Fig. 2, in which it is shown in section.

1.



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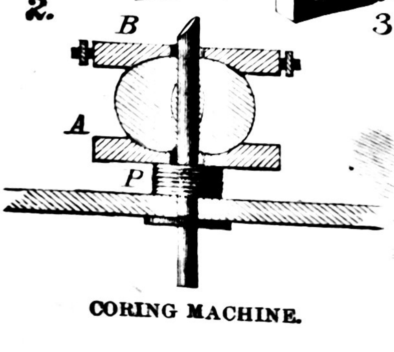
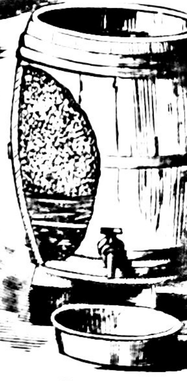


CORING MACHINE.

3.



FILTER.

All ironwork about the mill or press (rings, rivets, etc.) should be tinned or coated with good asphaltum varnish, as the color and sometimes taste of the cider are apt to be affected by contact with the rusty metal.

In pressing the pomace many of the best cider makers prefer to use hair cloth in place of straw between the layers, as it is more cleanly and does not affect the taste of or add anything to the expressed juice.

As the cider runs from the press it should be filtered through a hair sieve into a clean wooden vessel capable of holding as much juice as can be extracted in one day.

Under favorable conditions the fine pomace will rise to the surface in about twenty-four hours—sometimes less—and in a short time grow very thick. Then it should be watched, and when white bubbles begin to appear at the surface, the liquid should be drawn off slowly from a faucet placed about three inches from the bottom of the tank, so as not to disturb the lees. The liquid drawn off should be received in clean, sweet casks, and must be watched. As soon as white bubbles of gas appear at the bunghole, it must be drawn off (racked) into clean casks as before, and this racking repeated as often as necessary until the first fermentation is completely at an end. Then the casks should be filled up with cider in every respect like that already contained in it and bunged up tight. Many cider makers add a gobletful of pure olive oil to the cider before finally putting in the bung and storing.

If it is desired to keep cider perfectly sweet—and this is rarely the case—it should be filtered on coming from the press, and then sulphured by the addition of about one-quarter ounce of calcium sulphite (sulphite of lime) per gallon of cider, and should be kept in small, tight, full barrels. The addition of a little sugar—say one-quarter of a pound per gallon—improves the keeping qualities of tart cider.

An easily constructed cider filter is shown in Fig. 3, and consists in a barrel provided with a tap near the bottom. The lower part is filled with dry wood chips covered with a piece of flannel. Over this a layer of clean rye straw is packed down, and then the barrel is filled with clean quartz sand, not too fine.

When the first fermentation of cider has been checked and the liquid barreled, it should be allowed to stand until it acquires the proper flavor.

Much of the excellency

of cider depends upon the temperature at which the fermentation is conducted. The casks containing the juice should be kept in a cellar, if possible, where the temperature does not exceed 50° Fah. When left exposed to the air, or kept in a warm place, much of the sugar is converted into vinegar and the liquor becomes hard and rough. On the contrary, when the fermentation is conducted at a low temperature, nearly the whole of the sugar is converted into alcohol and remains in the liquid instead of undergoing acetification. The change from alcohol to vinegar (acetous fermentation) goes on most rapidly at a temperature of about 95° Fah., and at a lower temperature the action becomes slower, until at 46° Fah. no such change takes place. Independently of the difference in quality of fruit used, the respect of temperature is one of the chief causes of the superiority of the cider made by one person over that made by another in the same neighborhood.

The more malic acid and less sugar present, the less the tendency to acetous fermentation; hence it often happens that tart apples produce the best cider. But cider made from such apples can never equal in quality that prepared at a low temperature from fruit rich in sugar, which, if properly cared for, will keep good twenty years.

When the first fermentation has subsided, and the liquor has developed the desired flavor in storage, it is drawn off into other barrels which have been thoroughly cleansed and sulphured, either by burning in the bunghole a clean rag dipped in sulphur or, what is better, by thoroughly rinsing the inside with a solution of bisulphite of calcium prepared by dissolving about a quarter pound of the sulphite in a gallon of water.

The isinglass—six ounces or more (in solution) to the barrel—should be stirred in as soon as transferred, and then a sufficient quantity of preserving powder of bisulphite of lime (not sulphate or sulphide), previously dissolved in a little of the cider, to entirely check fermentation. The quantity of this substance required rarely exceeds a quarter of an ounce to the gallon of cider. A large excess must be avoided, as it is apt to injuriously affect the taste.

Some makers sweeten their cider by additions, before fining, of sugar or glucose, the quantity of the former varying from three-quarters of a pound to one and a half pounds, while as a substitute about three times this quantity of glucose is required. Sweetened cider, when properly cared for, develops by aging a flavor and sparkle resembling some champagnes. Such ciders are best bottled when fined.

The following are the methods by which some of the beverages found in the market under the name of "champagne cider" are made:-

1.	Cider (pure apple)	3 bbl.
	Glucose sirup (A)	4 gal.
	Wine spirit	4 "

The glucose is added to the cider, and after twelve days' storage in a cool place the liquid is clarified with one-half gallon of fresh skimmed milk and eight ounces of dissolved isinglass. The spirit is then added and the liquor bottled on the fourth day afterward.

2.	Pale vinous cider	1 hhd.
	Wine spirit	3 gal.
	Glucose about	30 lb.

The liquid is stored in casks in a cool place for about one month, when it is fined down with two quarts of skimmed milk and bottled. Much of this and similar preparations are doubtless sold for genuine champagne.

3.	Pineapple cider	20 gal.
	Wine spirit	1 "
	Sugar	6 lb.

Fine with one gallon of skimmed milk after two weeks' storage in wood and bottle.—*Scientific American Supplement.*

Cider, Artificial.—Soft water, 25 gal.; tartaric acid, 2 lb.; New Orleans sugar, 25 lb.; yeast, 1 pt. Put into clean cask with bung out, and allow to stand twenty-four hours. Then add 3 gal. spirits and let stand forty-eight hours. It will keep well if not left exposed to the air, and if the cask is sweet.

Bottling Cider.—To have good bottled cider, it is necessary first that care should be taken in its manufacture. Apples picked by hand and perfectly ripe and sound are essential to the best quality. They should lie some time after picking. They should then be sorted, their surface wiped dry, and all the rotten fruit rejected. The cider may then be made in the usual manner by grinding and pressing. The cider should then be stored in a cool place to mature. After three or four months it should be racked off carefully, and then fined by adding to each hogshead a pound of isinglass finings. In two weeks from the time that the finings are added it should be again racked off, and if found sufficiently clear and sparkling it is ready for bottling; if not, it should be again fined and allowed to stand two weeks. Before bottling, the bung should be left out of the casks for ten or twelve hours to permit the escape of carbonic acid gas. The cider may then be placed in bottles, and the corks loosely placed in. The bottles should then be allowed to stand twenty-four hours. The corks may then be driven in and wired down. If the corks are driven in and wired when the cider is first put into the bottles there will be great danger of breaking the bottles by the accumulating pressure of the gas. All additions of flavoring materials are a decided damage to cider made from a fine quality of fruit, though they may improve juice of a poor quality. If the directions here given be strictly followed, a delicious cider will be produced.

Cider, to Can.—Cider may be preserved sweet for years by putting it up in airtight cans, after the manner of preserving fruit. The liquor should be first settled and racked off from the dregs, but fermentation should not be allowed to commence before canning.

Champagne Cider.—Good, pale vinous cider, 1 hhd.; proof spirit, 3 gal.; honey or sugar, 14 lb. Mix well, and let them remain together in a moderately cool place for one month, then add orange flower water, 3 pt., and in a few days fine it down with skimmed milk, ½ gal. A similar article, bottled in champagne bottles, silvered and labeled, is said to be sometimes sold for champagne.

Cider, to Clear.—Ground horseradish, 4 pts.; nearly 1 lb. of thick gray filtering paper to the barrel; shake or stir, until the paper has separated into small shreds; let it stand twenty-four hours, then draw off the cider by means of a siphon or stopcock.

Cider, to Improve.—Cider, 1 hogshead; rum, weak flavored, 2 gal.; alum, dissolved, 1 lb.; honey or coarse sugar, 15 lb.; sugar coloring, q. s.; bitter almonds, ½ lb.; cloves, ½ lb.; mix, and after three or four days fine down with isinglass. For champagne cider, omit the coloring, and fine with 2 qts. milk; this will render it very pale.

Cider, to Keep.—1. Place in each barrel immediately on making, mustard, 4 oz.; salt, 1 oz.; ground chalk, 1 oz. Shake well.

2. Mustard seed, 1 oz.; allspice, 1 oz.; olive ¼ pt.; alcohol, ½ pt.

Made Cider.—An article under this name is made in Devonshire, chiefly for the supply of the London market, it having been found that the ordinary cider will not stand a voyage to the metropolis without some preparation. The finest quality of made cider is simply ordinary cider racked into clean and well-sulphured casks; but the mass of that which is sent to London is mixed with water, molasses and alum. The cider sold in London under the name of Devonshire cider would be rejected even by the farmers' servants in that county.

How to Preserve Cider.—A pure, sweet cider is only obtainable from clean, sound fruit, and the fruit should therefore be carefully examined and wiped before grinding.

In the press, use hair cloth or gunny in place of straw. As the cider runs from the press, let it pass through a hair sieve into a large open vessel that will hold as much juice as can be expressed in one day. In one day, or sometimes less, the pomace will rise to the top, and in a short time grow very thick. When little white bubbles break through it, draw off the liquid through a very small spigot placed about 3 in. from the bottom, so that the lees may be left behind. The cider must be drawn off into very clean, sweet casks, preferably fresh liquor casks, and closely watched. The moment the white bubbles, before mentioned, are perceived rising at the bunghole, rack it again. It is usually necessary to repeat this three times. Then fill up the cask with cider in every respect like that originally contained in it, add a tumbler of warm, sweet oil, and bung up tight. For very fine cider it is customary to add at this stage of the process about ½ lb. of glucose (starch sugar) or a smaller portion of white sugar. The cask should then be allowed to remain in a cool place until the cider has acquired the desired flavor. In the meantime clean barrels for its reception should be prepared, as follows: Some clean strips of rags are dipped in melted sulphur, lighted and burned in the bunghole, and the bung laid loosely on the end of the rag so as to retain the sulphur vapor within the barrel. Then tie up ½ lb. of mustard seed in a course muslin bag, and put it in the barrel, fill the barrel with cider, add about ¼ lb. of isinglass or fine gelatine dissolved in hot water.

This is the old-fashioned way, and will keep cider in the same condition as when it went into the barrel, if kept in a cool place, for a year.

Professional cider makers are now using calcium sulphite (sulphite of lime), instead of mustard and sulphur vapor. It is much more convenient and effectual. To use it, it is simply requisite to add ⅛ to ¼ of an ounce of the sulphite to each gallon of cider in the cask, first mixing the powder in about a quart of the cider, then pouring it back into the cask and giving the latter a thorough shaking or rolling. After standing bunged several days to allow the sulphite to exert its full action, it may be bottled off.

The sulphite of lime (which should not be mistaken for the sulphate of lime) is a commercial article, costing about 40 cents a lb. by the barrel. It will preserve the sweetness of the cider perfectly, but unless care is taken not to add too much of it, it will impart a slight sulphurous taste to the cider. The bottles and corks used should be perfectly clean, and the corks wired down.

A little cinnamon, wintergreen, or sassafras, etc., is often added to sweet cider in the bottle, together with a drachm or so of bicarbonate of soda at the moment of driving the stopper. This helps to neutralize the acids, and renders the liquid effervescent when unstoppered; but if used in excess it may prejudicially affect the taste.

Raisin Cider.—This is made in a similar way to raisin wine, but without employing sugar, and with only 2 lb. of raisins to the gallon, or even more, of water. It is usually fit for bottling in ten days, and in a week longer is ready for use.

See *Wines (British).*

Cider, to Keep Sweet.—When the cider has reached the flavor required, add 1 to 2 tumblers of grated horseradish to each barrel of cider.

Cheap Cider.—Mix well together 10 gal. cold water, 7½ lb. brown sugar, ¼ lb. tartaric acid, add the juice expressed from 2 or 3 lb. dried sour apples, boiled.

LIQUORS AND CORDIALS

Liquors (Liqueurs) and Cordials.—Many of the following receipts for liqueurs and cordials come from the "Brewer and Distiller." By J. Gardner, F. C. S., but the majority of the receipts were specially translated from the French.

Liquors and cordials are stimulating beverages, formed of weak spirit, aromatized and sweetened. The manufacture of liqueurs constitutes the trade of the compounder, rectifier, or liqueurist.

The materials employed in the preparation of liquors or cordials are rain or distilled water, white sugar, clean flavorless spirit, and flavoring ingredients. To these may be added the substances employed as finings, when artificial clarification is had recourse to.

The utensils and apparatus required in the business are those ordinarily found in the wine and spirit cellar; together with a copper still, furnished with a pewter head and a pewter worm or condenser, when the method by distillation is pursued. A barrel, hogshead, or rum puncheon, sawn in two, or simply unheaded, as the case may demand, forms an excellent vessel for the solution of the sugar; and two or three fluted funnels, with some good white flannel, will occasionally be found useful for filtering the aromatic essences used for flavoring. Great care is taken to insure the whole of the utensils, etc., being perfectly clean, sweet, and well seasoned, in order that they may neither stain nor flavor the substances placed in contact with them.

French liqueurists dististinguish their liqueurs as "eaux" and "extraits," or liqueurs which, though sweetened, are entirely devoid of viscidity; and "baumes," "crêmes," and "huiles," which contain sufficient sugar to impart to them a sirupy consistence; usually "crêmes" contain less alcohol than "huiles."

The French names are retained in the receipts. Where it is not possible to make the liquors by distillation, the receipts which say by essences should be chosen. O. p. means over proof, u. p. means under proof. (See **Alcohol.**) The abbreviations of the metric system should not be forgotten, l. = liter; gr. = gramme; k. = kilogramme. It should be remembered the art of the liquorist can only be obtained by long practice; still with ordinary care very good results can be obtained. Do not get the liquors too aromatic. This is the fault of most amateurs. All liquors should be bottled and labeled with neat labels, and the top sealed with wax or tinfoil.

Absinthe.—1. From the tops of *Absinthium majus*, 4 lb.; tops of *Absinthium minus*, 2 lb.; angelica root, *Calamus aromaticus*, Chinese aniseed, and leaves of dittany of Crete, of each 15 grn.; brandy or spirit at 12 u. p., 4 gal.; macerate for ten days, then add water, 1 gal.; distill 4 gal. by a gentle heat, and dissolve in the distilled spirit crushed white sugar, 2 lb.

2. Spirit of wormwood, 172 parts; best sugar, 125 parts; orange flower water, 13½ parts; water, 125 parts. Dissolve the sugar in the water, and then add the orange flower water; thoroughly mix in the sirup the white of one egg. Next add the wormwood spirit, and heat the mixture very gently over a water bath, so as just to coagulate the albumen; immediately remove the liquid from the fire and filter.

Crème d'Absinthe.—(By Essences.)—Essence absinthe, 0·60 gr.; essence of English mint, 0·60 gr.; essence of anise, 3 gr.; essence of fennel, 0·80 gr.; alcohol, etc., same as Chartreuse.

Absinthe of Montpellier.—Large absinthe (dried), k. 0·250; green anise, k. 0·600; fennel, k. 0·400; coriander, k. 0·100; angelica seed, k. 0·50; alcohol at 85° 9·5 l. Digest the ingredients for twelve hours with alcohol, then add 4·5 l. of water, then distill 9·5 l. of perfumed spirit. Color as follows: dried hyssop (herb and flowers), k. 0·75; dried melisse (balm), k. 0·75; small absinthe, k. 0·100. The small absinthe is broken in small pieces, the hyssop and melisse are reduced to powder in a mortar. Digest the whole of the perfumed spirit at a low temperature. Allow it to cool. To this colored liquor add 5·5 l. of perfumed spirits, and reduce to 74° with 0·5 l. of water to produce 10 liters of the product.

Absinthe of Lyons.—Large absinthe, dried, 0·300 k.; green anise, 0.8 k.; fennel, 0·4 k.; angelica seeds, 0·030 k.: coloring, lemon balm, 0·1 k.; dried absinthe (small), 0·1 k.; hyssop (herb and flowers) 0·05 k.; dried veronica, 0·5 k.

Ageing Liquor.—Twenty lb. caustic soda at 60° Tw., 20 lb. white arsenic in powder. Boil until all the arsenic is dissolved. Make a solution of 3 lb. of chlorate of potash in 4 gal. of water; add the first liquor until it stands at 28° Tw.

Alkermes.—This liqueur is highly esteemed in some parts of the South of Europe.

1. Bay leaves and mace, of each 1 lb.; nutmegs and cinnamon, of each 2 oz.; cloves 1 oz., all bruised; cognac brandy, 3½ gal.; macerate for three weeks, frequently shaking, then distill over 3 gal., and add of clarified spirit of kermes, 18 lb.; orange flower water, 1 pt.; mix well and bottle. This is the original formula for the Alkermes de Santa Maria Novella, which is much valued.

2. Spice as last; British brandy, 4 gal.; water, 1 gal.; macerate as before, and draw over 4 gal.; to which add, of sirup, 2 gal., and sweet spirit of niter, ¼ pt. Cassia is often used for cinnamon. Inferior to the last.

Alkermès, de Florence. (By Essences.)—Ess. of calamus, 0·30 gr.; ess. of cloves, 0·50 gr.; ess. of Ceylon cinnamon, 0·20 gr.; ess. of roses, 0·40 gr.; extract of jasmine, 3 gr.; extract of anise, 3 gr.; alcohol, same as for chartreuse. Color with cochineal.

Crême d'Ananas.—Bananas, 800 gr.; alcohol, 4 l. Crust and infuse the bananas for a week in alcohol, then pass the liqueur through a silk strainer, pour melted sugar into 2·20 l. of water, add 0·050 l. of an infusion of vanilla. Color yellow with caramel.

Aniseed Cordial.—1. From aniseed, 2 oz., or essential oil, 1½ dr., and sugar, 3 lb. per gal. It should not be weaker than about 45 u. p., as at lower strengths it is impossible to produce a full-flavored article without its being milky or liable to become so.

2. *Anisette de Bordeaux.*—1. Foreign.—Aniseed, 4 oz.; coriander and sweet fennel seeds, bruised, of each 1 oz.; rectified spirit, ½ gal.; water, 3 qts.; macerate for five or six days, then draw over 7 pt., and add of lump sugar 2½ lb.

2. English.—Oil of aniseed, 15 drops; oil of cassia and caraway, of each 6 drops; rub them with a little sugar and then dissolve in spirit 45 u. p., 3 qt., by well shaking them together; filter, if necessary, and dissolve in the clear liquid, 1½ lb. of sugar.

Anisette. (*By Essences.*)—1. Ess. Chinese (star) anise, 7 gr.; ess. anise, 2 gr.; ess. of fennel, 0·80 gr.; ess. of coriander, 0·10 gr.; ess. of sassafras, 0·60 gr.; extract of orris, 6 gr.; extract of ambergris, 0·80 gr. Alcohol, etc., same as chartreuse.

2. Chinese anise, 5 gr.; essence anise, 2 gr.; essence of fennel, 0·60 gr.; essence of coriander, 0·10 gr.; essence of sassafras, 0.40 gr.; extract of orris, 4 gr.; extract of ambergris, 0·60 gr.; alcohol, 85°, 3·20 l.; water, 3·90 l.; sugar, 4·375 k.

Aqua Reale.—Dissolve 2 fl. dr. oil of lemon; 1½ fl. dr. oil of orange peel; 54 drops oil of cinnamon; 60 drops oil of cloves; 60 drops oil of mace; 4 fl. dr. vanilla essence; 1½ fl. dr. ambergris essence. Dissolve 13 lb. sugar in 2 gal. water, filter, and add to the above solution.

Arrack.—A spirituous liquor procured by distillation from palm wine, or a fermented infusion of rice. It is imported from the East Indies, and much used to make punch. When sliced pineapples are placed in arrack, and the spirit kept for some time, it acquires a most delicious flavor, and is thought to be unrivaled for making nectarial punch.

Arrack, Factitious.—*Syn.* Mock Arrack. Vauxhall Nectar.—*Prep.* Dissolve 23 gr. flowers of benzoin (benzoic acid) in 1 qt. good pale Jamaica rum. Sold for arrack.

Balm of Molucca—From mace, 1 drm.; cloves, ½ oz.; clean spirit, 22 u. p., 1 gal.; infuse for a week in a well-corked carboy or jar, frequently shaking, color with burnt sugar q. s., and to the clear tincture add 4½ lb. of lump sugar; dissolve in pure soft water, ½ gal. On the Continent this takes the place of the cloves of the English retailer.

Crême des Barbades.—1. Lemons, sliced, 2 doz.; citrons, sliced, ½ doz.; fresh balm leaves, 8 oz.; proof spirit, 4 gal.; digest for a fortnight, then express the liquor, strain, and add 2 gal. each of clarified sirup and pure water.

2. The fresh peels of 3 oranges and 3 lemons; cassia bruised, 4 oz.; mace, pimento, and cloves, of each 1 drm.; rum, at proof, 2½ gal.; digest as before, distill over 2 gal., and add clarified sirup, 1 gal. If wanted weaker, lower with clear soft water.

Crême des Barbades.—Essence of cedrat, distilled, 6 gr.; essence of Portugal, distilled, 8 gr.; essence of cinnamon, 0·40 gr.; essence of cloves, 0·40 gr.; essence of nutmeg, 0·20 gr.

Bead for Liquors.—Oil of vitriol, 2 oz.; sweet oil, 1 oz.; mixed in a glass bottle. One drop for 1 qt. of liquor.

Benedictine.—Cloves, 2 gr.; nutmegs, 2 gr.; cinnamon, 3 gr.; balm, peppermint, freshly gathered angelica and genepi of the Alps, 25 gr.; calamus, 15 gr., cardamom (small), 50 gr.; arnica flowers, 8 gr. Break and crush the materials and macerate for 2 days in 4 l. of alcohol at 85°. Distill after having added 3 l. of water and draw out 4 l., after which add a cold sirup made with 4 k. of sugar and 2 l. of water. Bring up to 10 l., color, and filter.

Bitters.—These have generally from 1 to 1½ lb. of sugar per gal.

Brandy.—Barrels, to give the Appearance of Age to.—Dissolve in 3 gal. water, 3 lb. sulphuric acid and 1 lb. sulphate of iron. Wash the barrels with it on the outside.

Apple, Imitation.—Forty gal. cologne spirit, 4 oz. apple brandy oil, cut in 1 pt. alcohol, 88%; 6 oz. D. R. glycerine; ½ gal. sugar sirup. No coloring.

Blackberry.—Forty gal. cologne spirit, 6 oz. blackberry oil, 2 gal. blackberry or cherry juice, ½ pt. ext. blackberry, and 4 oz. sugar coloring, to color.

Brandy, British.—*Syn.* Malt Brandy.—For a long time this liquor was distilled from spoiled wine and the dregs of wine, both British and foreign, mixed with beer bottoms, spoiled raisins, and similar substances. At the present day, spirit made from malt, potatoes, beet root and carrot is employed. Malt spirit is the best adapted for the manufacture of British brandy.

We annex formulas:

1. To 12 gal. of malt spirit at proof, add of water, 5 gal.; crude red tartar or winestone, previously dissolved in 1 gal. of boiling water, ¾ lb.; acetic ether, 6 fl. oz.; French wine vinegar, 2 qt.; French plums, bruised, 5 lb.; sherry bottoms, ½ gal.; mix these ingredients in a sherry or French brandy cask, and let them stand for about a month, frequently stirring the liquid with a stick; next draw over 15 gal. of the mixture from a still furnished with an agitator. Put the distilled spirit into a clean, fresh emptied cognac brandy cask, and add of tincture of catechu, 1 pt.; oak shavings, 1 lb.; and spirit coloring, ½ pt.; agitate occasionally for a few days, and then let it repose for a week, when it will be fit for use. This produces 15 gal. of brandy, 17 u. p. Age greatly improves it.

2. Malt spirit, 99 gal.; red tartar dissolved in water, 7 lb.; acetic ether, ½ gal.; wine vinegar, 5 gal.; bruised raisins or French plums, 14 lb.; bitter almond cake bruised and steeped for twenty-four hours in twice its weight of water, which must be used with it, ¼ lb.; water, q. s.; macerate as before, and draw over, with a quick fire, 120 gal. To the distilled spirit add a few lb. of oak shavings, 2 lb. of powdered catechu made into a paste with hot water, and spirit coloring, q. s., and finish as in the last. Produces 120 gal. of spirit, fully 17 u. p. Equal in quality to the last.

3. Clean spirit, 17 u. p., 100 gal.; nitrous ether, 2 qt.; ground cassia buds, 4 oz.; bitter almond meal, 5 oz.; sliced orris root, 6; oz. cloves, in powder, 1 oz.; capsicum, 1½ oz.; good vinegar, 3 gal.; brandy coloring, 3 pt.; powdered catechu, 2 lb.; full flavored Jamaica rum, 2 gal. Mix in an empty cognac piece, and macerate for a fortnight, with occasional stirring. Produces 106 gal., at 21 or 22 u. p.

4. Malt spirit, 17 u. p., 100 gal.; catechu, 2 lb.; tincture of vanilla, ½ pt.; burnt sugar coloring, 1 qt.; good rum, 3 gal.; acetic or nitrous ether, 2 qt. Mix as the last.

5. Clean spirit, 17 u. p., 89 gal; highly flavored cognac, 10 gal.; oil of cassia, 2 drm.; oil of bitter almonds, 3 drm.; catechu, in powder, 1 lb.; cream of tartar, previously dissolved in water, 1¼ lb.; concentrated acetic acid, ½ gal.; sugar coloring, 2 to 3 pt.; good rum, 1 gal.

To those of the above mixtures which are submitted to distillation, the French brandy coloring substance and catechu must be added after, not before, distillation.

California.—Forty gal. cologne spirit; 4 oz. husk essence; ¼ ounce light oil of vine; ½ pallargonic ether; 3 lb. wine sirup. Color with French brandy coloring.

Brandy, Caraway.—A species of cordial commonly prepared as follows: 1. Bruised caraway seeds, 4 oz.; lump sugar, 2 lb.; British brandy, 1 gal.; macerate a fortnight, occasionally shaking the bottle.

2. Sugar, 1 lb.: bruised caraways, 1 oz.; 3 bitter almonds, grated; spirit coloring, 1 oz.; pla spirit or gin, 22 u. p., ½ gal. Infuse, etc., a balm of Molucca. The coloring is sometim left out.

Catawba.—Forty gal. cologne spirit; 6 oz. catawba brandy oil, and 2 lb. wine sirup cut in 1 qt. alcohol, 88%. Color with French brandy coloring.

Cherry.—Forty gal. cologne spirit; 6 oz. cherry brandy oil cut in 1 pt. alcohol, 88%; gal. cherry juice; 1 qt. sugar sirup; 1 pt. cherry extract, and 4 oz. sugar coloring, to color.

Brandy, Cherry.—1. Brandy and cherries crushed, of each 1 gal.; let them lie together for 3 days, then express the liquid and add 2 lb. lump sugar; in a week or two decant the clear portion for use.

2. To the last add 1 qt. raspberry juice, and ½ pt. orange flower water. Both the above ar excellent.

3. Molasses, 1 cwt.; spirit, 45 u. p., 41 gal.; bitter almonds bruised, 1 lb., more or less taste; cloves, 1 oz.; cassia, 2 oz.; macerate month, frequently stirring. An article frequently sold as cherry brandy.

4. German cherry juice, 15 gal.; pure re spirit, 20 gal.; sirup, 5 gal.; oil of bitter almonds, 1 drm.

5. Mash 8 lb. black cherries, without be stoned, 10 qt. 95% alcohol. Macerate for weeks; press; add 5 lb. sugar dissolved in 2 ga brandy.

Brandy, Cider.—From cider and perry; a from the marc of apples and pears ferment It is very largely manufactured in the Unit States and Canada.

Brandy, Dantzic.—From rye, ground wi the root of *Calamus aromaticus*. It has mixed flavor of orris and cinnamon.

Ginger.—Forty gal. cologne spirits; 1½ ginger brandy oil; ½ gal. sugar sirup; 6 sugar coloring.

Brandy, Lemon.—1. Fresh lemons, sliced, doz.; brandy, 1 gal.; macerate for a week, pre out the liquid, and add of lump sugar, 1 lb.

2. Proof spirit, 7 gal.; essence of lemon, drm.; sugar, 5 lb.; tartaric acid, 1 oz.; dissolve in water; 2 gal. turmeric powder; of spirit coloring, a dessertspoonful; macerate, etc., a No. 1. Sometimes boiling milk is added to the above, in the proportion of 1 qt. to every gal.

Brandy, Malt.—Malt spirit, flavored with sweet spirits of niter and terra japonica, an colored with molasses, or spirit coloring.—Se Brit. Brandy.

New York Brandy.—Forty gal. cologne spirit or good rectified spirits; 2 oz. New York brandy essence, 1 oz. prussic ether, dissolved in 1 pt. alcohol, 88%. To improve, add 1½ pt. sugar sirup. Color with sugar coloring.

Orange Brandy.—To every ½ gal. of brandy allow ¾ pt. of Seville orange juice, 1¼ lb. loaf sugar. To bring out the full flavor of the orange peel, rub a few lumps of the sugar on 2 or 3 unpared oranges, and put these lumps to the rest. Mix the brandy with the orange juice, strained, the rinds of six of the oranges pared very thin, and the sugar. Let all stand in a closely covered jar for about three days, stirring it three or four times a day. When clear it should be bottled and close corked for a year; it will then be ready for use, but will keep any length of time. This is a most excellent stomachic when taken pure in small quantities; or as the strength of the brandy is very little deteriorated by the other ingredients, it may be diluted with water. To be stirred every day for three days. Sufficient to make 2 qts.; make this in March.

Brandy, Orange.—As lemon brandy, but substituting oranges.

Brandy, Pale.—This article has been already referred to. That of the ginshops and publicans is generally a spurious article, made by mixing together about equal parts of good brown French brandy, clean alcohol and soft water, and allowing the whole to stand until the next day to fine down.

Brandy, Patent.—This is merely very clean malt spirit mixed with about one-seventh or less of its bulk of strongly flavored cognac and a little coloring.

Brandy, Peach.—From peaches, by fermentation and distillation. Much used in the United States. A cordial spirit under the same name is prepared as follows:

1. From peaches, sliced and steeped in twice their weight of British brandy or malt spirit, as in making cherry brandy.

2. Bitter almonds bruised, 3 oz.; proof spirit, 10 gal.; water, 3 gal.; sugar, 5 or 6 lb.; orange flower water, ½ pt.; macerate for fourteen days. Add brandy coloring, if required darker.

3. Dissolve 1 gal. of honey in water, add 7 ga of alcohol, 1 gal. rum, 2 oz. of catechu bruise 2 oz. acetic ether; add ½ lb. of bitter almonds dissolved, 20 gal. water.

4. Peach.—Forty gal. cologne spirit; ¼ l peach brandy oil; 6 oz. glycerine: ½ gill sug sirup. No coloring.

Raspberry.—1. Pour as much brandy on

raspberries as will just cover them; let it stand for twenty-four hours, then drain it off and replace it with a like quantity of fresh spirit; after twenty-four hours more, drain this off and replace it with water; lastly, drain well and press the raspberries quite dry. Next add sugar to the mixed liquors, in the proportion of 2 lb. to every gal., along with ¼ pt. of orange flower water.

2. Mix equal parts of mashed raspberries and brandy together, let them stand twenty-four hours, then press out the liquor. Sweeten as above and add a little cinnamon and cloves, if agreeable; lastly, strain.

3. From raspberries, using the proportion given under cherry brandy. Sometimes a little cinnamon and cloves are added. The only addition, however, that really improves the flavor or bouquet is a little orange flower; water, a very little essence of vanilla, or a single drop of essence of ambergris.

Brandy, Shrub.—Brandy, 1 gal.; orange and lemon juice, of each 1 pt.; the peel of 2 oranges; do. of 1 lemon; digest for twenty-four hours, strain and add of white sugar, 4 lb., dissolved in water, 5 pts. After a fortnight decant the clear liquid for use.

Caraway Cordial.—This is generally made from the essential oil of caraway, with 2½ lb. of sugar per gal. One fl. drm of the oil is commonly reckoned equal to ¼ lb. of the seed. The addition of a very little oil of cassia and about half as much of essence of lemon or of orange improves it.

Crême de Cassis.—Infusion of currants, 4·20 l.; spirit of raspberries, 0·50 l.; alcohol, at 85°, 0·60 l.; white sugar, 5 k.; water, 1·60 l.

Crême de Céleri.—Essence of celery, 2 gr.; alcohol, 3·10 l.; water, 3·90 l.; sugar, 4·375 k.

Cedrat Cordial.—From essence (oil) of cedrat, ¼ oz.; pure spirit (at proof), 1 gal.; dissolve, add of water, 3 pt., agitate well; distill 3 qt., and add an equal measure of clarified sirup. A delicious liqueur. See *Crême* and *Eau*, further on.

Chartreuse.

Ingredients.	Green.	Yellow.	White.
China cinnamon.....	1·50 gr.	1·50 gr.	12·50 gr.
Mace....	1·50 gr.	1·50 gr.	3 gr.
Lemon balm, dried..	50 gr.	25 gr.	25 gr.
Hyssop in flower, tops..............	25 gr.	12·50 gr.	13·50 gr.
Peppermint, dried...	25 gr.	....	....
Thyme	3 gr.	....	....
Balsime (bal. major),	12·50 gr.	....	....
Genepi	25 gr.	12·50 gr.	12·50 gr.
Arnica, flowers of...	1 gr.	1·50 gr.	....
Balsam poplar, buds.	1·50 gr.	....	....
Angelica, seeds......	12·50 gr.	12·50 gr.	12·50 gr.
Angelica, roots	6·25 gr.	3 gr.	3 gr.
Coriander............	....	150 gr.	....
Cloves	....	1·50 gr.	3 gr.
Aloes, socotrine.....	....	3 gr.	....
Cardamom, small....	....	5 gr.	3 gr.
Nutmegs......... ...	....	....	1·50 gr.
Calamus	....	....	30 gr.
Tonka beans.........	....	....	1·50 gr.
Alcohol, at 85°.......	6·25 l.	4·25 l.	5·25 l.
White sugar.........	2·50 k.	2·50 k.	3·75 k.

Digest in alcohol for twenty-four hours. Distill so as to obtain, nearly all the spirit. Repeat the operation, if necessary, or add water to make 10 l. Color, and after reposing, filter.—*H.*

Chartreuse, by Essences.—Essence of lemon balm, 0·20 gr.; essence of hyssop, 0·20 gr.; essence of Angelica, 1 gr.; essence of English mint, 2 gr.; essence of Chinese cinnamon, 0·20 gr.; essence of cloves, 0·20 gr.; essence of nutmegs, 0·20 gr. Color yellow or green. Alcohol (85°), 3 l.; sugar, 5·6 k.; water, 2·6 l.; for 10 l.

Grande Chartreuse.—This renowned liqueur, made by the monks of the Monastery of the Grande Chartreuse, near Grenoble, is said to have the following composition; Essence of balm (flavored with lemon), 31 grn.; essence of hyssop, 31 grn.; essence of angelica, 2½ drm.; essence of English peppermint, 5 drm.; essence of nutmeg, 36 grn.; essence of cloves, 31 grn.; rectified alcohol, 3½ pt.; sugar, q. s.; the whole being colored yellow or green, according to taste. Another writer states that it is composed of carnations, wormwood and the young buds of the pine tree, and that there are three kinds—white, yellow and green, each differing in strength.

Cherry Cordial.—Mix 2¼ lb. cherry juice with 1½ qt. alcohol, 80%. Add 8 drops oil of cloves, ½ lb. sugar, 1¾ qt. water. Filter.

Cinnamon Cordial.—1. Proof spirits, 9 gal.; essential oil of cinnamon (cut in 1½ qt. alcohol), 3 drm.; clear soft water, 4½ gal.; simple sirup, 2⅜ gal. Agitate thoroughly and color if desired.

2. This is seldom made with cinnamon, owing to its high price, but either with the essential oil or bark of cassia, with about 2 lb. of sugar to the gal. It is preferred colored, and therefore may be very well prepared by simple digestion. The addition of 5 or 6 drops each of essence of lemon and orange peel, with about a spoonful of essence of cardamoms per gal., improves it. One oz. oil of cinnamon is considered equal to 8 lb. of the buds or bark. One fl. drm. of the oil is enough for 2½ gal. It is colored with burnt sugar.

Cordial, Citron.—1. Yellow rind of citron, 3 lb.; orange peel, 1 lb.; nutmegs bruised, 2 oz.; proof spirit, 13 gal.; distill or macerate, add water sufficient and 2 lb. of fine lump sugar for every gallon of the cordial.

2. From the oil or peel, with 3 lb. of sugar per gal., as above.

3. Rinds of yellow citrons, 3 lb.; orange peel, ¾ lb.; bruised nutmegs, 1½ oz.; proof spirits, 9 gal. Digest for twelve days, filter and add clear soft water, 4½ gal.; simple sirup, 2½ gal. Agitate. Color if desired.

Citronelle.—*Syn.* Eau de Barbades.—1. From fresh orange peel, 2 oz.; fresh lemon peel, 4 oz.; cloves, ½ drm.; corianders and cinnamon, of each 1 drm.; proof spirit, 4 pt.; digest for ten days; then add of water, 1 qt., and distill ½ gal.; to the distilled essence add of white sugar, 2 lb.; dissolved in water, 1 qt.

2. Essence of orange, ½ drm.; essence of lemon, 1 drm.; oil of cloves and cassia, of each 10 drops; oil of coriander, 20 drops; spirit, 58 o. p., 5 pt.; agitate till dissolved, then add of distilled or clear soft water, 3 pt.; well mix, and filter it through blotting paper, if necessary. Lastly, add of sugar dissolved in water, q. s.

Clairet.—Rossolis des Six Graines.—1. From aniseed, fennel seed, coriander seed, caraway seed, dill seed and seeds of the candy carrot *Athamantia cretensis* (Linn.), of each bruised, 1 oz.; proof spirit, ½ gal.; digest for a week, strain, and add of loaf sugar, 1 lb., dissolved in water, q. s.

2. *Eau-Clairette.*—Another very old French form was, 3 oz. cinnamon, eau de vie, 1 pt., to which was added sugar and rose water.

Cordial, Clove.—1. Bruised cloves, 1 oz., or essential oil, 1 drm., to every 4 gal. proof spirit. If distilled it should be drawn over with a pretty quick fire. It is preferred of a very deep color, and is therefore strongly colored with poppy flowers or cochineal, or more commonly with brandy coloring, or red sanders wood. It should have 3 lb. of sugar to the gal., and this need not be very fine. The addition of 1 drm. of bruised pimento, or 5 drops of the oil for every oz. of cloves improves this cordial.

2. Proof spirits, 9 gal.; essential oil of cloves (cut in alcohol), 1½ drm.; clear soft water, 4½ gal.; simple sirup, 3 gal. Color dark with sugar coloring. Agitate thoroughly.

Coffee Liqueur:

Ground roasted coffee..........	112 parts.
Diluted spirit......................	450 parts.

Digest, express and filter. To 300 parts of the filtered liquid add—

Tincture of vanilla............	5 parts.
Diluted spirit................. ...	150 parts.
Simple sirup	225 parts.

—*Pharm. Zeit.*

Cognac.—Forty gal. good spirits, distilled or rectified; 6 oz. œnantic ether; 1 oz. cognac brandy oil, dissolved in 1 qt. alcohol, 88%; 1½ lb. wine sirup. Color with sugar coloring.

Coloring for Liqueurs.—Red: Cudbear, 400 gr.; alcohol, 85° 1 l. Macerate for five days, stirring frequently. Decant the liquid, treat the residue in the same manner, unite the two liquids and filter.

Yellow Color.—Saffron, 100 gr.; water, 1·5 l. Boil half the water and pour on the saffron. Cover tightly and macerate until the infusion is cold. Repeat the operation on the residue and mix the two liquids. Add 750 c. c. of alcohol at 85° and filter.

Best white crushed or lump sugar, 6 lb.; water, ¾ pt. Boil until black. Remove from the fire, cool with water, stirring as the water is added. Used to color liquors from a light amber to a dark brown. For brandy, whisky, old rye, etc.

Red Color.—Beet root, red sanders, or cochineal.

Port Wine Color.—Extract of rhatany.

The substances employed in France to color liqueurs are, for—

Blue.—Sulphate of indigo, nearly neutralized with chalk and the juice of blue flowers and berries.

Amber, Fawn and Brandy Color.—Burnt sugar or spirit coloring.

Green.—Spinach or parsley leaves digested in spirit and mixtures of blue and yellow.

Red.—Powdered cochineal or Brazil wood, either alone or mixed with a little alum.

Violet.—Blue violet petals, litmus, or extract of logwood.

Purple.—The same as violet, only deeper.

Yellow.—An aqueous infusion of safflower or French berries and the tinctures of saffron and turmeric.

Cordial.—Aromatized and sweetened spirit, employed as a beverage. Cordials are prepared by either infusing the aromatics in the spirit and drawing off the essence by distillation, which is then sweetened, or without distillation, by flavoring the spirit with essential oils, or simple digestion on the ingredients, adding sugar or sirup as before. Malt or molasses spirit is the kind usually employed, and for this purpose should be perfectly flavorless, as, if this be not the case, the quality of the cordial will be inferior. Rectified spirit of wine is generally the most free from flavor, and when reduced to a proper strength with water, forms the best and purest spirit for cordial liquors.

Coriander Cordial.—From coriander seeds, as *Cloves.* A few sliced oranges improve it.

Crême d'Anis.—As *Aniseed* cordial, only richer.

Crême des Barbades.—As *Citronelle*, adding some of the juice of the oranges and an additional pound of sugar per gallon.

Crême de Cacao.—Infuse roasted Carac's nuts cut small, 1 lb., and vanilla, ½ oz., in brandy, 1 gal., for eight days; strain and add of thick sirup 3 qt.

Crême de Cedrat.—Huile de Cedrat. From spirit of citron, 1 pt.; spirit of cedrat, 1 qt.; proof spirit, 3 qt; white sugar, 16 lb.; dissolved in pure soft water, 2 gal.

Crême de Genépi des Alpes.—Génépi in flower, 200 gr.; peppermint flowers, 100 gr.; balsam, 100 gr.; angelica root, 50 gr.; galanga, 12·5 gr.; alcohol at 85°, 4·25 l., white sugar, 3·75 k. General method, color green. Product 10 liters.

Crême de Macarons.—1. From cloves, cinnamon and mace, of each, bruised, 1 drm.; bitter almonds, blanched and beaten to a paste, 7 oz.; spirit, 17 u. p., 1 gal.; digest a week, filter and add of white sugar, 6 lb., dissolved in pure water, 2 qt.

2. Clean spirit, at 24 u. p., sp. gr. 0·945, 2 gal.; bitter almonds, ¾ lb.; cloves, cinnamon and mace, of each in coarse powder, 1½ drm., infuse for ten days, filter, and add of white sugar, 8 lb., dissolved in pure water, 1 gal.; lastly, give the liqueur a violet tint with infusion or tincture of litmus and cochineal. An agreeable, nutty flavored cordial, but, from containing so many bitter almonds, should only be drunk in small quantities at a time. The English use only one-half the above quantity of almonds.

Crême de Naphe.—From sweetened spirit 60 u. p., containing 3½ lb. of sugar per gal., 7 qt.; foreign orange flower water, 1 qt. Very delicious.

Crême de Noyeau. See *Noyeau.*

Crême d'Orange.—From sliced oranges, 3 dozen; rectified spirit, 2 gal.; digest for fourteen days; add, of lump sugar, 28 lb., previously dissolved in water, 4½ gal.; tincture of saffron, 1½ fl. oz.; and orange flower water, 2 qt.

Crême de Portugal.—Flavored with lemon, to which a little oil of bitter almonds is added.

Curaçoa.—From sweetened spirit, at 56 u. p., containing 3½ lb. of sugar per gal., flavored with a tincture made by digesting the oleosaccharum prepared from Seville oranges, nine in number; cinnamon, 1 drm.; and mace, ¾ drm. in rectified spirit, 1 pt. It is colored by digesting in it for a week or ten days, Brazil wood in powder, 1 oz; and afterward mellowing the color with burnt sugar, q. s.

Curaçoa (by Essences).—Essence of curaçoa, distilled, 7 gr.; essence of Portugal, 2·50 gr.; essence of cloves, 5 gr. Bitter infusion of curaçoa, q. s.; alcohol, 3·10 l.; water, 3·90 l.; sugar, 4·375 k.

Delight of the Mandarins.—From spirit, 22 u. p., 1 gal.; pure soft water, ½ gal.; white sugar crushed small, 4½ lb.; Chinese aniseed and ambrette or musk seed, of each, bruised, ½ oz; safflower, ¼ oz.; digested together in a carboy or stone bottle capable of holding double, and agitated well every day for a fortnight.

Eau de Cedrat.—Syn. cedrat water. As crême de cedrat, but using less sugar.

Eau de Chasseurs. See *Peppermint.*

Eau de Vie d'Andeye.—Syn Eau de vie d'anis; aniseed liqueur brandy; liqueur d'hendaye. From brandy or proof spirit, 1 gal.; sugar, ¾ lb.; dissolved in aniseed water, 1 pt. This is sometimes flavored with fennel.

Eau d'or Liqueur.—Put in a jar 1 oz. of coriander seeds, ½ oz. of cinnamon, ½ oz. of cloves, 1 qt. of spirit of wine registering 60° by Gay Lussac's alcoholometer. Let the spices steep for twenty-four hours, then add 3 gills of sirup registering 24° on the saccharometer and filter the whole three times through a felt filtering bag; add 2 sheets of gold leaf to the liqueur; shake it to divide the gold and bottle it.

Eau de Vie de Dantzick (by Essences).—Essence Ceylon cinnamon, 40 grn.; essence China cinnamon, 1·20 grn.; essence of coriander, 0·20 grn.; essence of lemon (distilled), 0·80 grn.; alcohol, etc., the same as curaçoa.

Eau de Vie de Dantzick.—Ceylon cinnamon, 25 grn.; cloves, 1·5 grn.; green anise, 12·5 grn.; celery seeds, 12·5 grn.; caraway seeds, 12·5 grn.; cumin seeds, 3 grn.; alcohol at 85°, 5 l.; white sugar, 2·5 k. General method without rectification. Product, 10 l.

Fining for Cordials (Eggs).—Take the white of an egg with each 5 gal. of the cordial, beat up with alcohol and add gradually to the cordial.

Fining with Potash.—For each 10 gal. of the cordial add 1 oz. of potassium carbonate dissolved in 1 pt. of water, add gradually.

Gin.—1. Clean corn spirit, at proof, 80 gal.; newly rectified oil of turpentine, 1 pt.; mix well by violent agitation, add culinary salt, 7 or 8 lb., dissolved in water, 30 or 40 gal.; again well agitate and distill over 100 gal., or until the feints begin to rise. Product—100 gal., 22 u. p., besides 2 gal. contained in the feints. If 100 gal., 17 u. p., be required, 85 gal. of proof spirit, or its equivalent at any other strength, should be employed.

2. Proof spirit, as above, 8 gal.; oil of turpentine, 1 to 1½ oz.; salt, 1 lb., dissolved in water, 3 or 4 gal.; draw 10 gal., as before. 22 u. p.

3. Clean corn spirit, 80 gal.; oil of turpentine, ¾ to 1 pt.; pure oil of juniper, 1 oz. to 3 oz.; salt, 7 lb.; water, 35 gal., draw 100 gal. as above. 22 u. p.

4. To the last add oil of caraway, ½ oz., oil of sweet fennel, ¼ oz.; distill as before.

5. To No. 3 add essential oil of almonds, 1 drm., or less; essence of lemon, 3 or 4 drm.; distill as before.

6. To No. 1 add creosote, 1 to 2 drm., before distillation.

7. To No. 3 add creosote, 1 to 2 drm., before distillation.

8. Proof spirit, 80 gal.; oil of turpentine, ½ pt.; oil of juniper, 3 oz.; creosote, 2 drm.; oranges and lemons, sliced, of each 9 in number, macerate for a week, and distill 100 gal. 22 u. p.

The oil of turpentine for this purpose should be of the best quality, and not that usually vended for painting, which contains resin and fixed oil. Juniper berries, bitter almonds, and the aromatic seeds, may be used instead of the essential oils; but the latter are most convenient. Turpentine conveys a plain gin flavor, creosote imparts a certain degree of smokiness, lemon and other aromatics a creaminess, fullness, and richness. Gin may also be prepared by simple solution of the flavoring in the spirit, but is of course better for distillation.

Sweetened gin is made from unsweetened gin, 22 u. p., 95 gal.; lump sugar, 40 to 45 lb., dissolved in clear water, 3 gal.; mix well, and fine it down as above. Produces 100 gal., at 26 u. p. This, as well as the last, is usually permitted at 22 or 24 u. p., which is also done when the gin has been further lowered with water so to be even 30 or 35 u. p.—*Brewer and Distiller.*

Gold Cordial.—From angelica root, sliced, 1 lb.; raisins, ½ lb.; coriander seeds, 2 oz.; caraway seeds and cassia, of each 1½ oz.; cloves, ½ oz.; figs and sliced licorice root, of each 4 oz.; proof spirit, 3 gal.; water, 1 gal.; digest 2 days, and distill 3 gal. by a gentle heat; to this add, of sugar, 9 lb., dissolved in rose water and clean soft water, of each 1 qt.; lastly, color the liquid by steeping in it 1¼ oz. of hay saffron. This cordial was once held in much esteem for its supposed medicinal virtues, the formula being mentioned by Arnold de Villeneuve. It derives its name from a small quantity of gold leaf being formerly added to it, which was supposed to add greatly to its remedial value. Until comparatively recent years, gold was credited with extraordinary remedial powers.

Cordial, Gout.—Rhubarb, senna, coriander seed, sweet fennel seed, and cochineal, of each 2 oz.; licorice root and saffron, of each 1 oz.; raisins, 2½ lb.; rectified 90% alcohol, 2 gal.; digest for fourteen days. Used in gout and rheumatism.

Hollands.—Geneva, Schiedam, Hollands Gin, Dutch Gin.—1. The materials employed in the distilleries of Schiedam, in the preparation of this excellent spirit, are 2 parts of the best unmalted rye and 1 part of malted bigg, reduced to the state of coarse meal by grinding. About a barrel (36 gal.) of water, at a temperature of from 162° to 168° Fah., is put into the mash tun for every 1½ cwt. of meal, after which the malt is introduced and stirred, and lastly, the rye is added. Powerful agitation is next given to the magma till it becomes quite uniform, when the mash tun is covered over with canvas, and left in this state for two hours. Agitation is then again had recourse to, and the transparent spent wash of a preceding mashing is added, followed by as much cold water as will reduce the temperature of the whole to about 85° Fah. The gravity of the wort at this point varies from 33 to 38 lb. A quantity of the best pressed Flanders yeast, equal to 1 lb. for every 100 gal. of the mashed materials, is next stirred in, and the whole is fermented in the mash tun for about three days, or until the attenuation is from 7 to 4 lb. (sp. gr. 1·007 to 1·004). During this time the yeast is occationally skimmed off the fermenting wort. The wash, with the grains, is then transferred to the still, and converted into low wines. To every 100 gal. of this liquid, 2 lb. of juniper berries (three to five years old), and about 1 lb. of salt, are added, and the whole is put into the low wine still, and the fine spirit drawn off by a gentle heat, one receiver only being employed. The product per quarter varies from 18 to 21 gal. of spirit, 2 to 3 o. p.

2. Best Hollands.—Hollands rectified to the strength of 24° Baume (sp. gr. 0·9125, or about 6 o. p.).

3. Dr. Thompson gives the following formula for preparing gin, Geneva or Hollands. He states it is one used by the Dutch manufacturers: One hundred and twelve lb. of barley malt and 228 lb. of rye meal are mashed with 460 gal. of water, at 162° Fah. After infusing a sufficient time, cold water is added until the gravity of the wort is reduced to 45 lb. per barrel. The whole is let into a fermenting back at 80° Fah., ½ a gal. yeast is added, the temperature rises to 90°, and the fermentation is over in forty-eight hours. The wash is attenuated until the specific gravity is about 12 or 15 lb. per barrel. Both the wash and grains are then put into the still; the low wines are distilled off, these are redistilled, and the production is rectified. A few juniper berries and some hops are used to communicate a peculiar flavor to the spirit.

4. English made.—From juniper berries (at least a year old and crushed in the hands), 3 lb.; rectified spirit, 1½ gal. (or proof spirit, 2½ gal.); digest, with agitation, for a week, and then express the liquid; after twenty-four hours' repose, decant the clear portion, add it to good corn spirit, at 2 or 3% over proof, 90 or 100 gal.; and mix them well together.

5. From juniper berries, 2½ lb.; sweet fennel seed, 5 oz.; caraway seeds, 3½ oz.; proof spirit, 2 gal., corn spirit, 90 or 100 gal.

6. As the last, with the addition of Strasburg turpentine or Canadian balsam, 1 lb.—*Brewer and Distiller.*

Huile d'Anis. See *Crême d'Anis.*

Huile d'Annanas.—Five oz. rasped pineapple are macerated in 15 oz. 90% alcohol for fifteen or twenty days, at the end of which time the liquid is decanted and filtered. It is then well shaken up with 15 oz., by weight, of clear sirup.

Huile Liqueureuse.—1. De la Rose. From eau de rose, 1 part; simple sirup, 2 parts; mixed together.

2. Des Fleurs d'Orange.—From orange flower water and sirup, as No. 1.

3. De Vanille.—From essence of vanilla, 1 drm.; simple sirup, 1 pt.

The above are kept in small decanters, and used to flavor water, grog, liqueurs, etc., instead of sugar or capillaire; also to perfume the breath. Other flavored sirups, for the same purpose, are prepared in a similar manner.

Huile de Vanille.—Flavored with essence or tincture of vanilla. It is kept in a decanter, and used to flavor liqueurs, grog, etc.

Huile de Vénus.—From the flowers of the wild carrot, 2½ oz., and sugar, 3 lb. to the gal. It is generally colored by infusing a little powdered cochineal in it.

Liqueur Hygienique de Dessert (formula Raspail.)—Alcohol at 56°, 0·10 l.; angelica root, 3 gr.; calamus, 0·20 l.; myrrh, 0·20 gr.; cinnamon, 0·20; aloes, 0·20 gr.; cloves, 0·10 gr.; vanilla, 0·10 gr.; camphor, 0·050 gr.; white nutmegs, 0·025 gr.; saffron, 0·005 gr. The whole mixture is allowed to digest for several days in the sun in a well corked bottle.

Jargonelle.—*Syn.* Jargonelle Cordial. Flavored with essence of jargonelle pear (acetate of amyl). Pineapple cordial and liqueurs from some other fruits are also prepared from the artificial fruit essences.

Kirschwasser.—A spirituous liquid distilled in Germany and Switzerland from bruised cherries. From the rude manner in which it is obtained, and from the distillation of the cherry stones (which contain prussic acid) with the liquid, it has often a nauseous taste, and is frequently poisonous. When properly made and sweetened it resembles noyeau.

Huile de Kirschenwasser.—Essence of noyaux, 4 gr.; essence of neroli (Paris), 0·40 gr.

Lemon Cordial.—Digest fresh and dried lemon peel, of each 2 oz., and fresh orange peel, 1 oz., in proof spirit, 1 gal., for a week; strain with expression, add of clear soft water q s. to reduce it to the desired strength, and lump sugar, 3 lb. to the gal. The addition of a little orange flower or rose water improves it.

Jessamine Liqueur.—Pick ¼ lb. of jessamine blossoms, and put them in a jar with 2 qt. of 90% alcohol, registering 50° by Gay Lussac's alcoholometer; let the blossoms steep for two days; prepare 1½ pt. of clarified sirup registering 30° on the saccharometer. Strain the jessamine spirit, mix it with the cold sirup and filter it, with some paper, through a filtering bag. Continue pouring the liqueur through and through until it is quite clear, and bottle it for use.

Lemon Cordial.—Digest 2 oz. each of fresh and dried lemon peel and 1 oz. of fresh orange peel in 1 gal. of proof spirit for a week; strain with expression, add clear soft water to reduce it to the desired strength, and lump sugar, in the proportion of 2½ lb. to 3 lb. to the gal. The addition of a little orange flower or rose water improves it.

Essence of Lemon.—The rinds of 80 fresh lemons; alcohol at 85°, 12 l. Process the same as cedrat.

Essence of Lemon, Concentrated.—Rinds of 100 fresh lemons; alcohol, same as above. Process same as cedrat.

Liqueurs.—Dilute alcohol, aromatized and sweetened. The French liqueurists are proverbial for the superior quality, creamlike smoothness and delicate flavor of their cordials.

Liquodilla.—Flavored with oranges and lemons, of each, sliced, 3 in number; with sugar 2½ lb. per gal.

Lovage Cordial.—From the fresh roots of lovage, 1 oz. to the gal. A fourth of this quantity of the fresh roots of celery and sweet fennel are also commonly added. In some parts a little fresh valerian root and oil of savine are added before distillation. This cordial is much valued by the lower classes in some of the provinces for its stomachic and emmenagogue qualities.

Maraschino (Marasequin).—A delicate liqueur spirit distilled from a peculiar cherry growing in Dalmatia, and afterward sweetened with sugar. The best is from Zara, and is obtained from the marasca cherry only. In the middle of the last century the profits arising from the sale of this compound were so considerable that the Senate of Venice, where it was principally manufactured, monopolized the trade in it. An inferior quality is distilled from a mixture of cherries and the juice of licorice root.

Maraschino (Zara), Imitation.—Essence of noyaux, 3·5 gr.; essence of neroli, 0·50 gr.; extract of jasmine, 1 grn.; extract of vanilla, 1·50 gr.

Marasquin de Zara.—Essence of noyaux, 3·5 gr.; essence of neroli, 0·5 gr.; extract of jasmine, 1 gr.; extract of vanilla, 1·5 gr.; alcohol, etc., same as for chartreuse.

Crême de Millefleurs.—Essence of neroli, 5 gr.; essence of roses, 20 gr.; extract of jasmine, 2 gr.; extract of jonquil, 1·5 gr.; extract of reseda, 2 gr.; extract of tuberose, 2 gr.; alcohol, etc., same as for chartreuse.

Mint Liqueur (Crême de Menthe).—Put 2 oz. of green mint into a jar, pour over 1 qt. of 90% alcohol, registering 50° by Gay Lussac's alcoholometer, and let it steep for eight days; add 3 gills of sirup registering 30° on the saccharometer, mix it with some filtering paper and pour the whole into a filtering bag. When the liqueur is thus strained it should be perfectly clear and limpid; bottle it and keep the bottles in a dry place.

Mint Cordial.—Oil of peppermint, ¼ oz.; sirup, 2½ pt.; rectified spirits, 5 pt.; alcohol, ½ pt. Color light green.

Nectar.—The fabled drink of the mythological deities.—The name was formerly given to wine dulcified with honey; it is now occasionally applied to other sweet and pleasant beverages of a stimulating character. The following liqueur is so called: Chopped raisins, 2 lb.; loaf sugar, 4 lb.; boiling water, 2 gal.; mix and stir frequently until cold, then add 2 lemons, sliced; proof spirit, brandy or rum, 3 pt.; macerate in a covered vessel for six or seven days, occasionally shaking; next strain with pressure, and let the strained liquid stand in a cold place for a week to clear; lastly, decant the clear portion and bottle it.

Noyau.—Crême de Noyou.—This is a pleasant nutty-tasted liquor; but, from the large proportion of prussic acid which it contains, it should be partaken of very moderately.

1. Bitter almonds, bruised, 3 oz.; spirit, 22 u. p., 1 qt.; sugar, 1 lb. (dissolved in) water, ¾ pt.; macerate for 10 days, frequently shaking the vessel; then allow it to repose for a few days, and decant the clear portion.

2. As the last, but substituting apricot or peach kernels with the bruised shells for the almonds.

3. To either of the above, add of coriander seed and ginger, of each, bruised, 1 drm.; mace and cinnamon, of each ½ drm.

4. Crême de Noyau de Martinique.—Loaf sugar, 24 lb.; water 2½ gal.; dissolve, add, of proof spirit, 5 gal.; orange flower water, 3 pt.; bitter almonds, bruised, 1 lb.; essence of lemons, 2 drm.

Oil of Cedrat. See *Crême de Cedrat.*

Orange Cordial.—Like lemon cordial or crême d'orange, from fresh orange peel, ½ lb. to the gal.

Orange Peel, Essence of.—Golden.—Fresh yellow rind of orange, 4 oz.; rectified spirit, ½ pt.; water, ½ pt.; digest for a week, press, filter and add of sherry 1 qt. A pleasant liqueur.

Parfait Amour.—Perfect Love.—1. Flavored with the yellow rind of 4 lemons and a teaspoonful of essence of vanilla to the gal., with sugar, 3 lb., and powdered cochineal, q. s. to color.

2. Sugar, 8½ lb.; 90% alcohol, 5½ lb., dissolved in 6 lb. water; essence of cloves, 1¼ oz.; essence of mace, 3 drm.; essence of lemon, 1 drm.; colored rose.

Peach Cordial.—Pour 3½ gal. alcohol, 90%, Tr. over 2 lb. sliced peaches. Digest from 8 to 10 days. Filter and add 3 gal. white wine, 15½ lb.

sugar dissolved in 3½ qt. water.

Peppermint.—Peppermint Cordial; Sportsman's Cordial; Eau de Chasseurs.—This well-known compound is perhaps in greater demand in every part of the kingdom than all the other cordials put together.—1. From peppermint water and gin or plain spirit, 22 u. p., of each 1 pt.; lump sugar, ¾ lb.

2. Wholesale.—English oil of peppermint, 5 oz., is added to rectified spirits of wine, 3 pt.; and the mixture is agitated well together for some time in a corked bottle capable of holding 4 pt. or more; it is then emptied into a cask having a capacity of upward of 100 gal., and 86 gal. of perfectly white and flavorless proof spirit is poured in, and the whole well agitated for ten minutes; a solution of the best double refined lump sugar, 2¾ cwt., in about 35 gal. pure filtered rain water, is then added, and the contents of the cask well rummaged up in the usual manner for at least fifteen minutes; sufficient clear rain water to make up the whole quantity to exactly one hundred gallons, and holding in solution 5 oz. alum, is next added, and the whole is again well agitated for at least a quarter of an hour, after which the cask is bunged down, and allowed to repose for a fortnight before it is broached for sale.

3. Pure proof spirits, 4½ gals.; essential oil of peppermint, 1¼ drm., cut first in 1¼ qt. strong alcohol; pure soft water, 7½ gal.; simple sirup, 2½ gal. Agitate, and if not clear add 2½ drm. alum dissolved in 1¼ pt. rain water. Let it stand 10 days.

Peppermint Water.—Pepperment flowers, 1 k.; water, 4 l.; salt, 250 grammes; macerate, and draw off 2 liters.

Pimento.—*Syn.* Pimento Cordial, Pimento Dram.—Rather strongly flavored with allspice or pimento. It has obtained a great repute in the West Indies in diarrhœa, cholera, and bowel complaints generally.

Pineapple Cordial.—Pineapple extract, 3 oz.; extract of lemon, ¾ oz.; sirup, 1½ gal.; rectified spirits, 2¼ gal.

Pineapple Liqueur.—Take ½ lb. of peeled pineapple, and cut it into slices; boil 3 qt. of sirup until it registers 38° on the saccharometer; add the slices of pineapple, the juice of 4 oranges and the yellow peel of 2 oranges; let it boil up, and pour the whole into a jar. Close the jar carefully, and let the pineapple infuse thus for two days. Strain the sirup through a hair sieve, mix with 1 qt. of 90% alcohol registering 35° by Gay Lussac's alcoholometer, and filter the whole through a felt filtering bag Bottle the liqueur, and keep in a dry place.

Quince Liqueur.—Grate a sufficient quantity of quinces over a basin to obtain 2 lb. of pulp; add 1 qt. of sirup registering 30° on the saccharometer; cover the basin, and let it remain thus for one day. Pour the contents of the basin into a filtering bag, add 1 pt. of 90% alcohol, registering 35° by Gay Lussac's alcoholometer, to the strained sirup; mix, and pour the whole again through a filtering bag and bottle the liqueur.

Raspberry Cordial.—From raspberry brandy, sirup, and water, equal parts. A similar article is prepared by flavoring sweetened spirit with the artificial raspberry essence.

Ratafia.—Originally a liqueur drunk at the ratification of an agreement or treaty. It is now the common generic name in France of liqueurs compounded of spirit, sugar, and the odoriferous and flavoring principles of vegetables, more particularly of those containing the juices of recent fruits, or the kernels of apricots, cherries, or peaches. In its restricted sense this name is commonly understood as referring to cherry brandy or peach brandy.

The following list includes those ratafias which are commonly prepared by the French liquerists:

Ratafia d'Angelique.—From angelica seeds, 1 dr.; angelica stalks, 4 oz.; blanched bitter almonds, bruised, 1 oz.; proof spirit or brandy, 6 qt.; digest for 10 days, filter; add, of water, 1 qt.; white sugar, 3½ lb.; mix well, and in a fortnight decant the clear portion through a piece of clean flannel.

Ratafia d'Anis. See *Aniseed Cordial.*

Ratafia de Baume de Tolu.—From balsam of tolu, 1 oz.; rectified spirit, 1 qt.; dissolve, add water, 3 pt.; filter, and further add of white sugar, 1½ lb.

Ratafia de Brou de Noix.—From young walnuts with soft shells pricked or pierced, 60 in number; brandy, 2 qt.; mace, cinnamon, and cloves, of each 15 gr.; digest for 8 weeks; press, filter, add of white sugar, 1 lb., and keep it for some months before decanting it for use.

Ratafia de Cacao.—Ratafia de Chocolat.—From Caracca cacao nuts, 1 lb.; West Indian cacao nuts, ½ lb., both roasted and bruised; proof spirit, 1 gal.; digest for 14 days, filter, and add, of white sugar, 2½ lb.; tincture of vanilla, ½ dr. (or a shred of vanilla may be infused with the nuts in the spirit instead); lastly, decant in a month, and bottle it.

Ratafia de Café.—1. From coffee, ground and roasted, 1 lb.; brandy or proof spirit, 1 gal.; sugar, 2 lb. dissolved in water, 1 qt.; as last.

2. Coffee, 1 lb.; brandy, 6¼ lb.; macerate the coffee in the brandy for seven or eight days, and then distill over a water bath, and to the distillate add a very clear sirup, made by dissolving 2½ lb. of the best sugar in 4 lb. of water. This liqueur has all the aroma and none of the bitterness of the coffee.

Ratafia de Cassis.—From black currant juice, 1 qt.; cinnamon, 1 dr.; cloves and peach kernels, of each, ½ dr.; brandy, 1 gal.; white sugar, 3 lb.; digest for a fortnight, and strain through flannel.

Ratafia de Cerise. From Morello cherries, with their kernels, bruised, 8 lb.; brandy or proof spirit, 1 gal.; white sugar, 2 lb.; as last.

Ratafia de Chocolat. Ratafia de cacao (*see ante*).

Ratafia de Coings. From quince juice, 3 qt.; bitter almonds, 3 dr.; cinnamon and coriander seeds, of each, 2 dr.; mace, ½ dr.; cloves, 15 gr., all bruised; rectified spirit, quite flavorless, ½ gal.; digest for a week, filter, and add of white sugar, 3½ lb.

Ratafia de Coings (Quinces).—Expressed juice of ripe quinces, 0·6 l.; spirit of cloves, 0·05 l.; alcohol, at 0·85°, 2·5 l.; sugar, 1·25 k.; water, 6 l.; color yellow with caramel.

Ratafia de Crême.—From crême de noyeau and sherry, of each ¼ pint; sirup, ½ pt.; fresh cream, 1 pt.; beaten together.

Ratafia de Curaçoa. See *Curaçoa.*

Ratafia de Framboises.—Raspberry Cordial.—To 1¼ lb. of raspberry juice add ¼ lb. of cherry juice; boil this with 2 lb. of sugar; add 4 pt. of brandy, and let it macerate for a fortnight; filter.

Ratafia de Framboises (Raspberries).—Infusion of raspberries, 3 l.; infusion of wild cherries, 1 l.; alcohol, 85°, 1 l.; sugar, 5 k.; water, 1·60 l.

Ratafia de Genièvre.—From juniper berries, each pricked with a fork, ¼ lb.; caraway and coriander seed, of each, 40 gr.; finest malt spirit, 22 u. p., 1 gal.; white sugar, 2 lb.; digest a week, and strain with expression.

Ratafia de Grenoble.—From the small wild black cherry with the kernels bruised, 2 lb.; proof spirit, 1 gal.; white sugar, 3 lb.; citron peels, a few grains, as before.

Ratafia de Grenoble, de Teyssère.—From cherries bruised with the stones, 1 qt.; rectified spirit, 2 qt.; mix, digest for forty-eight hours, then express the liquid, and heat it to boiling in a close vessel; when cold, add of sugar or sirup, q. s., together with some noyeau, to flavor, and a little sirup of the bay laurel, and of galangal; in three months decant and bottle it.

Ratafia de Noyeau.—From peach or apricot kernels, bruised, 120 in number; proof spirit or brandy, 2 qt.; white sugar, 1 lb.; digest for a week, press and filter.

Ratafia d'Œillets.—From clove pinks, without the white buds, 4 lb.; cinnamon and cloves, of each, 15 gr.; proof spirit, 1 gal.; macerate for ten days, express the tincture, filter, and add of white sugar, 2½ lb.

Ratafia d'Ecorce d'Orange.—Crême d'Orange.

Ratafia d'Fleurs d'Orange.—From fresh orange petals, 2 lb.; proof spirit, 1 gal.; white sugar, 2½ lb.; as last. Instead of orange flowers, 1 dr. oil of neroli may be used.

Ratafia à la Provencale.—From striped pinks, 1 lb.; brandy or proof spirit, 1 qt.; white sugar, ¾ lb.; juice of strawberries, ¾ pt.; saffron, 20 gr.; as before.

Ratafia des Quatre Fruits.—From cherries, 30 lb.; gooseberries, 15 lb.; raspberries, 8 lb.; black currants, 7 lb.; express the juice, and to each pint add, of white sugar, 6 oz.; cinnamon, 6 gr.; cloves and mace, of each, 3 gr.

Ratafia Rouge.—From the juice of black cherries, 3 qt.; juices of strawberries and raspberries, each, 1 qt.; cinnamon, 1 dr.; mace and cloves, of each, 15 gr.; proof spirit or brandy, 2 gal.; white sugar, 7 lb.; macerate, etc., as before.

Ratafia Sec.—Take of the juice of gooseberries, 5 pt.; juices of cherries, strawberries, and raspberries, of each, 1 pt.; proof spirit, 6 qt.; sugar, 7 lb.; as before.

Ratafia à la Violette.—From orris powder, 3 oz.; litmus, 4 oz.; rectified spirit, 2 gal.; digest for ten days, strain, and add of white sugar, 12 lb., dissolved in soft water, 1 gal.

Rhubarb Cordial.—Rinse gently 40 lb. best quality of rhubarb stalks in a 15 or 20 gal. tub. Add 4 gal. water, stir and squeeze the pulp with the hands so as to separate the juice. Let it rest for a few hours, strain, and press through a coarse cloth. The residue may have 1 gal. more of water pressed through it. Add 30 lb. loaf sugar, and after its solution, water to make it up to 10½ gal. Put in a tub covered with a blanket and some boards at 55° to 60° F. until it begins to ferment. Then put into a cask, a portion at a time, as its working decreases until all is in. Let the scum as it works run out of the bung hole. When nearly through fermenting drive the bung, put in a spile, which is to be removed every few days until the barrel is safe from bursting. Use more or less sugar according to the strength and sweetness desired.

Rose Cordial.—Extract of rose, 1 oz.; sirup, 2 qt.: rectified spirit, 3 qt.

Rosoli.—Rose leaves, 8¾ oz.; orange flower water, 4 pt.; Ceylon cinnamon, 124 gr.; cloves, 1 oz.; macerate the rose leaves, the cinnamon, and the cloves in 17½ pt. spirit, and distill; and to the distillate add 15 oz. of sugar dissolved in 4 pt. orange flower water.

Rosolio de Turin.—Essence of anise, 2·50 gr.; essence of fennel, 0·30 gr.; essence of bitter almonds, 3 gr.; essence of roses, 0·60 gr.; essence of ambergris, 0·40 gr. Color with cochineal.

Sighs of Love.—1. From proof spirit (flavored with otto of roses) and sirup in equal parts.

2. From sugar, 6 lb.; pure soft water, q. s. to produce 1 gal. sirup, to which add, of eau de rose, 1 pt.; proof spirit, 7 pt. It is colored a pale pink by powdered cochineal. A very pleasant cordial. A drop or two, not more, of essence of ambergris or vanilla improves it.

Strawberry Cordial.—1. Proof spirit, 6¼ gal. strawberries, 10 qt.; digest for ten days, and draw off; add soft water, 3¾ gal.; simple sirup, 2½ gal. Agitate, and color if desired.

2. Juice of fresh strawberries, 1½ pt.; sirup, 3 qt.; rectified spirit, 3 qt. Color with liquid carmine, q. s.

Tears of the Widow of Malabar.—As balm of Molucca, but employing cloves bruised, ½ oz.; mace shredded, 1 dr., and a teaspoonful of essence of vanilla for flavoring; ¼ pt. of orange flower water is sometimes added. It is slightly colored with burnt sugar.

Trappistine.—Large absinthe, 40 gr.; angelica, 40 gr.; mint, 80 gr.; cardamom, 40 gr.; balm, 30 gr.; myrrh, 20 gr.; calamus, 20 gr.; cinnamon, 4 gr.; cloves, 4 gr.; mace, 2 gr.; alcohol at 85°, 4·5 l.; white sugar, 3·750 k. Follow the method given for chartreuse. After two days of maceration, distill and rectify. Add sirup and color green or yellow.

Usquebaugh.—*Syn.* Escubac. Literally, mad water, the Irish name of which whisky is a corruption. It is applied to a strong cordial spirit, much drank in Ireland, and made in the greatest perfection at Drogheda.

1. Brandy or proof spirit, 3 gal.; dates without their kernels and raisins, of each, bruised, ¼ lb.; juniper berries, bruised, 1 oz.; mace and cloves, of each, ¾ oz.; coriander and aniseed, of each, ½ oz.; cinnamon, ¼ oz.; macerate, with frequent agitation, for fourteen days, then filter and add of simple sirup, 1 gal.

2. Pimento and caraways, of each 3 oz.; mace, cloves and nutmegs, of each 2 oz.; aniseed, corianders and angelica root, of each 8 oz.; raisins, stoned and bruised, 14 lb.; proof spirit, 9 gal.; digest as before, then press, filter or clarify and add of simple sirup, q. s. Should it turn milky, add a little strong spirit or clarify it with alum or filter through magnesia.

Usquebaugh is either colored yellow with saffron (about ¼ oz. per gal.), or green with sap green (about ½ oz. per gal.); either being added to the other ingredients before maceration in the spirit.

Vanilla Liqueur.—Two sticks of vanilla, 3 pt. of brandy or proof gin, 1 lb. of sugar. Break up the vanilla into the spirit, cork and let it infuse a fortnight. Boil the sugar in a quart of water to a clear sirup, then pour in the spirit and vanilla and simmer 10 minutes. Filter and bottle.

Vanilla Cordial.—Put 1¼ oz. of vanilla beans in 3 qts. alcohol and 1½ gallons of water. Macerate for a few days, then distill. Add to this 11 lbs. of sugar. After it is dissolved, color with cochineal and filter.

Huile de Vanille.—Infusion of vanilla, 0·80 l.; alcohol, at 85°, 2.40 l.; white sugar, 4·35 k.; water, 3·9 l.

Vermouth.—As the celebrated Vermouth de Turin cannot be made in this country to advantage, the receipt of Ollivero is given. Coriander, 500 gr.; rinds of bitter oranges, 250 gr.; orris root, powdered, 250 gr.; elder flowers, 200 gr.; red cinchona, 150 gr.; calamus, 150 gr.; large absinthe, 125 gr.; holy thistle (*Centaurea benedicto*), 125 gr.; elecampane (roots), 125 gr.; little centuary, 125 gr.; germander, 125 gr.; Chinese cinnamon, 100 gr.; angelica (roots), 65 gr.; nutmegs, 50 gr.; galanga, 50 gr.; cloves, 50 gr.; cassiæ, 30 gr.; white wine of Picardy, 100 l. Digest for five or six days, draw off the liquor, size with fish glue, and allow to stand for fifteen days.

Vermouth au Madère.—Large absinthe, 125 gr.; angelica roots, 60 gr.; holy thistle, 125 gr.; burgwort, 125 gr.; veronica, 125 gr.; rosemary, 125 gr.; rhubarb, 30 gr.; red cinchona, 200 gr.; orris root, powdered, 250 gr.; infusion of curaçoa, 25 centiliters; common Madeira wine, 92 l.; raisin sirup, 3 l.; cognac at 40°, 5 l. Digest for three days, draw off the clear, size with fish sounds; after eight days of rest, rock and size again before bottling.

Vespetro by Essences.—Essence of anise, 3 gr.; essence of caraway, 2 gr.; essence of fennel, 0·60 gr.; essence of coriander, 0·80 gr.; essence of lemon, distilled, 1 gr.; alcohol at 85°, 2·80 l.; water, 6·60 l.; sugar, 2·50 k.

Whisky, Bourbon, Imitation of.—1. Nine gal. of proof spirit, 1 gal. Bourbon highly flavored, 1 qt. malt whisky, 1 gill white vinegar, 1 gill sirup and 10 to 20 minims of cognac oil dissolved in alcohol. Color with the aid of caramel.

2. Forty gal. rectified whisky; 1¼ oz. Bourbon oil dissolved in 1 pt. alcohol, 88%; 1 pt. white sugar sirup.

3. *Irish.*—Forty gal. rectified whisky; 4 to 6 oz. Irish whisky oil, dissolved in 1 pt. alcohol, 88%; 1 lb. double refined glycerine.

4. *Monongahela.*—Forty gal. rectified whisky; 1¼ oz. Monongahela oil, dissolved in 1 pt. alcohol, 88%; 1 pt. white sugar.

5. *Rye.*—Forty gal. rectified whisky; 1¼ oz. rye oil, dissolved in 1 pt. alcohol 88%; 1 pt. white sugar sirup.

6. *Scotch.*—Forty gal. rectified whisky; 4 to 6 oz. Scotch whisky oil, dissolved in 1 pt. alcohol 88%; 1 lb. double refined glycerine.

7. *Wheat.*—Forty gal. rectified whisky; 1¼ oz. wheat whisky oil, dissolved in 1 pt. alcohol, 188%; ½ oz. malt oil; 1 lb. double refined glycerine.

PUNCH

Punch.—Punch is a beverage made of various spirituous liquors or wine, hot water, the acid juice of fruits, and sugar. It is considered to be very intoxicating; but this is probably because the spirit being partly sheathed by the mucilaginous juice and the sugar, its strength does not appear to the taste so great as it really is. Punch, which was almost universally drunk among the middle classes about fifty or sixty years ago, has almost disappeared from our domestic tables, being superseded by wine. There are many different varieties of punch. It is sometimes kept cold in bottles, and makes a most agreeable summer drink.

1. Juice of 3 or 4 lemons; yellow peel of 1 or 2 lemons; lump sugar, ¾ lb.; boiling water, 3½ pt.; infuse ½ hour, strain, add porter ½ pt.; rum and brandy, of each ¾ to 1 pt. (or either alone 1½ to 2 pt.) and add more warm water and sugar, if desired weaker or sweeter.

2. To Make Hot Punch.—Ingredients.—½ pt. rum, ½ pt. brandy, ¼ lb. sugar, 1 large lemon, ½ teaspoonful of nutmeg, 1 pt. of boiling water. Rub the sugar over the lemon until it has absorbed all the yellow part of the skin; then put the sugar into a punchbowl; add the lemon juice (free from pips), and mix these two ingredients well together. Pour over them the boiling water, stir well together, add the rum, brandy and nutmeg; mix thoroughly and the punch will be ready to serve. It is very important in making good punch that all the ingredients are thoroughly incorporated; and to insure success, the processes of mixing must be diligently attended to. Allow a quart for 4 persons; but this information must be taken *cum grano salis;* for the capacities of persons for this kind of beverage are generally supposed to vary considerably.

3. Cold Punch.—Arrack, port wine, water, of each 1 pt.; juice of 4 lemons; sugar, 1 lb.; mix.

Arrack Punch, Imitation.—Two or three preserved tamarinds dissolved in a bowl of any kind of punch will impart to it a flavor closely resembling arrack.

Brandy.—1. To 1 pt. Cognac brandy, ½ pt. of Jamaica rum, ½ pt. of peach brandy, add 2 lb. white sugar, 1 gill of lemon and 1 gill of lime juice; mix all well together, and add ice equal to 2 qt. of water; cut 2 lemons into thin slices, peel and slice thin 1 pineapple; add these to the punch and let stand to ripen and blend for 1 hour before using.

2. To 1 teaspoonful of raspberry sirup add 1 tablespoonful white sugar, 1 wineglass brandy, the same quantity of water, a small piece lemon, 2 slices of orange, 1 piece of pineapple. Fill the tumbler with shaved ice, shake well, and dress the top with berries in season; sip through a straw.

3. Take 3 doz. lemons, chip off the yellow rinds, taking care that none of the white underlying pith is taken, as that would make the punch bitter, whereas the yellow portion of the rinds is that in which the flavor resides and in which the cells are placed containing the essential oil. Put this yellow rind into a punch bowl, add to it 2 lb. of lump sugar, stir the sugar and peel together with a wooden spoon or spatula for nearly ½ hour, thereby extracting a greater quantity of the essential oil. Now add boiling water, and stir until the sugar is completely dissolved. Squeeze and strain the juice from the lemons and add it to the mixture; stir together and taste it; add more acid or more sugar, as required, and take care not to render it too watery. "Rich of the fruit and plenty of sweetness," is the maxim. Now measure the sherbet, and to every 3 qt. add 1 pt. of Cognac brandy and 1 pt. of old Jamaica rum, the spirit being well stirred as poured in. This punch may be bottled and kept in a cool cellar; it will be found to improve with age.

Claret.—1. To a large punch bowl half filled with broken ice add 2 lb. of pulverized sugar; 6 oranges cut crosswise into thin slices, 6 bottles of claret, and 1 bottle of champagne; mix well together and let stand for one hour before using.

2. Take 1 tablespoonful of sugar, a small slice of lemon, 2 or 3 slices of orange. Fill the tumbler with shaved ice, and then pour in the claret, shake well, and ornament with berries in season. Place a straw in the glass.

3. Take 1½ tablespoons sugar, 1 slice of lemon, 2 or 3 slices orange. Fill the tumbler with shaved ice; pour in the claret; shake well.

Gin Punch.—1. To half a pint of old Holland gin add 1 gill of maraschino, the juice of 2 lemons, and the yellow rind of 1 previously infused in the gin, 2 gills of simple sirup or 4 oz. of pulverized sugar, and 1 qt. of seltzer water. Mix well and freeze to a semi-solid.

2. Yellow peel and juice of 1 lemon; gin, ¾ pt.; water, 1¼ pt.; sherry, 1 glass.

Iced.—Champagne or Rhenish wine, 1 qt.; arrack, 1 pt.; juice and yellow peels of 6 lemons; white sugar, 1 lb.; soda water, 1 or 2 bottles; ice as cream.

Milk Punch.—1. Take 1 tablespoonful sugar; 2 tablespoonfuls water; 1 wineglass brandy; ½ wineglass Santa Cruz rum; ½ tumbler shaved ice. Fill with milk and shake well; grate a little nutmeg on top.

2. Yellow rinds of 2 dozen lemons; steep for two days in rum or brandy, 2 qt.; then add spirit, 3 qt. more; hot water, 3 qt.; lemon juice, 1 qt.; loaf sugar, 4 lb.; 2 nutmegs, grated; boiling milk, 2 qt.; mix, and in two hours strain through a jelly bag.

Norfolk.—French brandy, 20 qt.; yellow peels of 30 oranges and 30 lemons; infuse for twelve hours; add 30 qt. of cold water, 15 lb. lump sugar, and the juice of the oranges and lemons; mix well, strain through a hair sieve, add new milk, 2 qt., and in six weeks bottle. Keeps well.

Orange.—As No. 1, using oranges, and adding a little orange wine. A little curaçoa, noyeau, or maraschino improves it.

Princes'.—Put into a freezing can a bottle of sparkling champagne, a gill of maraschino, ½ pt. of strawberry sirup, the juice of 6 oranges, the yellow rind of 1 rubbed on sugar.

Raspberry.—As Norfolk, but using raspberry juice or vinegar for oranges or lemons.

Regent's.—1. Pare off the thin yellow rinds from 4 oranges and 4 lemons; express the juice from the same fruit and strain it; add to it the yellow rinds, with 2 sticks of cinnamon broken up, ½ doz. cloves, and a dessertspoonful of vanilla sugar. Simmer these ingredients very slowly for half an hour in 1 qt. of simple sirup. Express the juice from 1½ doz. of lemons, and add it to the decoction. Then make a strong infusion of the finest green tea and add it to the mixture; after which add equal portions of old Jamaica rum and Cognac brandy, according to the strength required. Mix all well together, strain through a hair sieve, put it into a freezer and make very cold.

2. Strong hot green tea, lemon juice, and capillaire, of each 1½ pt.; rum, brandy, arrack, and curaçoa, of each 1 pt.; champagne, 1 bottle; mix, and slice a pineapple into it.

Tea.—Hot tea, 1 qt.; arrack, ½ bottle; white sugar, 6 oz.; juice of 8 lemons; yellow rinds of 4 lemons.

Wine.—Sugar, 1 lb.; yellow peel of 3 lemons; juice of 9 lemons; arrack, 1 pt.; port or sherry wine (hot), 1 gal.; cinnamon, ¼ oz.; nutmeg, 1 drm.

Whisky.—To 1 wineglass of whisky add 2 wineglasses of hot water, and then sugar to taste. Dissolve the sugar well with 1 wineglass of the water, then pour in the whisky, and add the balance of the water; sweeten to taste, and put in a small piece of lemon rind or a thin slice of lemon.

WINES AND WINE MAKING

Wine Making.—The grapes are not removed from the vine until they are quite ripe. As the maturation not only of different varieties, but of the same kind, is dependent upon the season, no stated period can be fixed for the commencement of the vintage. The grapes are ready to be gathered when the white kind becomes of a brownish yellow color, and the red or blue, very dark purple or nearly black. Shears, pruning knives, or scissors, are used for the removal of the fruit from the vine.

In making the finer wines, previous to being pressed, the bunches are carefully examined, and any unripe or damaged grapes are picked off and used to make inferior wine, or in the gathering the unripe specimens are left on the branch to ripen. The blue and dark varieties, when intended for the best wines, are, with few exceptions, removed from the stalks before being pressed; the white grapes are pressed with the stalks

Except with those grapes which produce wines that are likely to become viscous or ropy, the stalks are not left for any length of time in contact with the grape juice or must. There are various modes of separating the grapes from the stalks. One method consists in the employment of a wooden fork or trident, ½ yd. or more in length; by turning this round in a wooden pail filled with the fruit, the grapes become detached from the stalks, which are thus brought to the surface and removed.

In another contrivance the separation is effected by inclosing the bunches in cages made of parallel wires. Inside the cage there is a stirrer; when this is turned by an external handle, the grapes alone drop through the wires, leaving the stalks in the cage. Sometimes the separation is accomplished by means of hurdles, which are so manipulated that the fruit only shall pass through the meshes.

Previous to their being pressed, the grapes have to undergo the preliminary process of bruising or crushing. This is sometimes done by their being trodden under the naked feet of men, on a large wooden stage or platform; at other times the men wear heavy boots, while in some cases the grapes are placed in a vat and bruised with a kind of wooden pestle. Sometimes they are crushed between wooden grooved rollers. Of all these processes, the first, although the least cleanly, possesses the advantage of not crushing the pips or stalks, and is thus free from the risk of imparting an unpleasant flavor to the wine.

There is considerable divergence in the statements of different writers as to the yield of must or juice from ripe grapes. Payen says it amounts to from 94 to 96% of the total weight of the grape. Dupré and Thudichum obtained from three samples of grapes respectively 78·75%, 76·75%, and 72·25%. Wagner averages it from about 60 or 70%.

When a white wine is required, the bruised grape, whether of the white or red variety, is at once pressed, except when, as happens with some kinds of fruit, it is kept to allow of the development of the bouquet. The mode of procedure is different when a red wine is to be prepared. The crushed grapes must then be kept in a tub or vat, loosely covered over, until an examination of a small quantity of the juice shows it has acquired the necessary color. For it to do this sometimes takes from three or four days to a month.

During this period, alcohol has been formed in the pulp, and this, with the tartaric acid of the fruit, has dissolved out the coloring principle of the grape. Great care is necessary at this stage to prevent the too long exposure of the crushed and fermenting fruit to the air.

Wine presses are of various patterns.

In many wine making establishments, iron presses have supplanted wooden ones, over which they possess the advantages of greater cleanliness and non absorption of the must. The wine press in general use in the Gironde consists of a tall, round basket, made of perpendicular laths. The fruit is placed in this basket, and upon the fruit a wooden block, to which a screw is attached; a nut works upon the screw from above downward, and presses the wooden block upon the fruit, the liquid from which is forced out through the laths and collected.

In the manufacture of champagne and some red wines, very powerful presses are employed; but these possess the objection of pressing the fixed oil from the pips and an unpleasantly tasting juice from the stalks, and thereby damaging the product. In some establishments, centrifugal machines have been used, not only with the result of yielding a better wine, but of effecting a considerable gain in time and labor.

The must, being received into proper receptacles, next undergoes the vinuos fermentation. In the case of white wines the must is kept separate from that subsequently procured by submitting the husks, pips, and stalks to additional pressure, and is sold as the first or superior wine.

But with red wines the husks (and in some cases the marc) are thrown into the fermenting vat, by which means the wine acquires an additional amount of coloring matter. In this case, when the completed wine is drawn off, the husks are again pressed, and the wine so obtained added to the first instalment. As the tannic acid is derived from the skins and seeds of the grape, wines prepared in this manner usually contain a considerable amount of this substance.

The fermentation is conducted in different countries at different temperatures, and, of course, with different results. When must is fermented at 15° to 20° Cent. (59° to 68° Fah.) it yields a wine strong in alcohol, but wanting in bouquet; while if the fermentation be carried on at 5° to 15° Cent. (41° to 59° Fah.) the product will be a wine rich in bouquet, but poor in alcohol.

The wines of Spain, the south of France, Austria and Hungary, are produced at the higher temperature, and those of Germany, for the most part at the lower one. The fermentation is carried on in large wooden vats. In some places vats of sandstone or brick are used for this purpose. The fermentation of white wines, such as those of the Rhine and Gironde, is effected in new and perfectly clean casks or hogsheads, the bungholes of which are left open to allow the escape of the carbonic acid. Opinions differ as to whether air should be admitted or not during fermentation. The process is undoubtedly quickened if the must be aerated. The aeration is sometimes performed by a bellows fitted with a rose nozzle. During the operation of blowing in, the must is to be kept at a low temperature, to prevent the volatilization of the bouquet. When the opposite method is followed, various devices are in use for excluding the air, or at any rate an excess of it. In some cases the vat, being provided with a suitable lid, has a hole, or is arranged with a tube, for the escape of the carbonic acid. Koles and Bamberger accomplish the same end, without letting in the external air, by means of a glass tube bent twice at right angles; one limb of the tube passes through the bunghole into the wine and the other or outer limb into a vessel of water. In another contrivance the lid of the vat is fitted with a valve, which, opening only outward, allows of the exit of the carbonic acid.

Red wines are fermented in large and, in most cases, open vats, fitted in the inside with perforated shelves, which, being below the surface of the liquid, prevent the husks rising to the top, and setting up acetous fermentation. After the completion of the fermentation of Burgundy wines, in some places it is the filthy custom for men to enter the vat, and by their vigorous movements to mix the contents.

It is satisfactory to learn that this particularly objectionable practice is getting somewhat into disuse.

The length of time necessary for the completion of the fermentation varies with the locality, the temperature of the apartment, and with the quality of the wine required. In France, for the ordinary descriptions of wine, it generally takes from three days to a week, and in Germany from one to two weeks; with the finer kinds of wine it occupies four, five or six weeks. The progress of the fermentation may be estimated from the specific gravity of the liquid, since as the fermentation proceeds, and the sugar is undergoing conversion into alcohol, the wine, of course, becomes more attenuated and its specific gravity diminishes. It has been calculated that half per cent. of the alcohol present in the wine escapes during fermentation, as well as a considerable quantity of carbonic acid. An apparatus has been invented for collecting these products, by causing them to pass into water by means of a hydraulic bung.

When the fermentation is over the wine is run into casks, any sediment, such as lees or yeast, being left behind in the fermenting vessel. It is most important that the casks used for this purpose should be absolutely clean. Before a cask is used a second time it should be thoroughly sulphured.

Those wines which contain a large amount of alcohol are sometimes allowed to remain in the fermenting vat until they have cleared; but weak wines are immediately drawn off into the cask, to prevent the setting in of the acetous fermentation. The casks must be filled to the bungholes. A second or minor fermentation takes place in the wine when in the cask, during which tartar or bitartrate of potash is deposited on the sides of the cask, and yeast at the bottom. This second fermentation should be allowed to go on at a low temperature, 5° to 10° C. (41° to 50° F.), and at a slow rate. In some cases it is made to extend to three or six months.

When the second fermentation is over, the casks are filled to the bunghole and securely closed, or the wine is at once drawn into fresh casks to be stored. In these it remains closely bunged up until more tartar is deposited, after which it may be racked off into bottles or casks. When wine is to be stored for any length of time it is necessary to repeat the racking off frequently. Racking is performed by means of a siphon inserted in the bunghole, or by a cock suitably fixed in the cask. If the racked wine is not perfectly clear, it is fined by the addition of isinglass, previously softened by soaking in a small quantity of wine. After the addition of the isinglass, the cask is then filled to the bunghole, closed, and remains undisturbed for about six weeks, and if, at the end of that time, it is not perfectly bright, it is made to undergo a second racking. In wine making countries, blood and solution of glue are sometimes used for fining red wines which contain much tannin. Milk is also occasionally employed for the same purpose. The racking should be performed in cool weather, and preferably in the early spring.

The manufacture of champagne differs in its details from that of the so-called still wine. The best wine is made from a black grape of very fine quality, known as the *Noirien*, or *Pineau*, and grown in the champagne district. None but the best selected grapes are used; all those that are rotten, unripe, or in any way unsound, being rejected. The grapes are gathered when they have attained their greatest size. The vintage commences early in October. To prevent the juice being colored by the skin of the grape, the fruit is submitted to pressure as quickly as possible after being gathered. Very powerful machines are employed for this purpose, since the champagne grape, unlike other varieties, is not previously crushed. Great care is taken to apply the pressure evenly and to conduct the operation with all expedition, for if this exceeds two hours the must will be colored. The grapes are sometimes pressed four times. In good seasons the must obtained from the different pressings is mixed together. In middling ones the first yield is kept for making the best wines, nor is the fourth mixed with the other two. The light colored must is first conveyed into a large vat, where it remains for six, twelve, or eighteen hours, according to the temperature.

At the end of this time certain vegetable matters that would damage the taste of the ensuing wine, as well as render it liable to a second fermentation, become deposited. Directly the must has cleared it is run into small barrels of 2,000 liters capacity, in which it undergoes fermentation. Sometimes the clearing of the juice is accomplished by filtration; at others, when the weather is warm and fermentation sets in so rapidly as not to allow the impurities to subside, it is run into casks filled with the fumes from burning sulphur; by this means the excessive fermentative action is arrested, and sufficient time is given for the dregs to settle. The juice having been made clear by either of the above methods, is drawn into barrels, which are arranged in rows in the cellars. The barrels are filled to the bung, the froth which is formed during the fermentation flowing out at the bungholes. In some wine making establishments, the barrels are tightly bunged up, there being previously added to the contents 1% of brandy. The casks are opened at the end of December, and the wine fined by means of isinglass; this operation being conducted at the lowest possible temperature. If, at the end of a fortnight, it has not become bright, it is left for another fortnight, and then, if not clear, it undergoes a second fining. The fining process must be used with caution; when overdone it diminishes, and frequently stops the activity of the subsequent fermentation. To obviate this, the wine should be judiciously exposed to the air, and a minute quantity of yeast added to each hogshead before it is bottled.

When the wine has cleared, before being bottled, cane sugar is added to it, since the quantity of undecomposed natural sugar in the wine is not sufficient to furnish the requisite amount of carbonic acid gas, the ingredient to which champagne owes its effervescent properties.

Champagne bottles constitute a very considerable item in the trade expenses of the wine maker. He pays the glass manufacturer 28 francs a hundred for them; and some wine makers give orders for as many as from 50,000 to 250,000 at a time.

The bottles as they arrive are examined by an experienced person, and those which contain flaws of any kind, or are not perfectly new, symmetrical, and strong are rejected. These average about 10%. The bottles are required to be as nearly as possible of uniform weight and thickness. The inside of each bottle is scrubbed by means of a revolving hair brush and clean water. After being drained, the bottles are rinsed with 90% alcohol and closed with an old but clean cork. They are thus ready, when required, for filling. The wine maker also expends a large amount of money in the purchase of corks, which must be of the best and soundest description. It has been found to be very false economy to use inferior kinds. The wine being drawn into bottles to a height of 2 or 3 inches from the top of the neck, the bottles have next to be corked, the cork being secured in the bottle by a small iron band, called an *agrafe*. All these operations have to be performed deftly and rapidly by experienced workmen. With what speed they are accomplished may be imagined from the fact that an *atelier* of five workmen, who divide the labor, will bottle and cork from twelve to fifteen hundred bottles daily, two bottles passing through all hands in one minute. The corking, etc., finished, the bottles are next placed on their sides, and stacked in cellars or caves, each stack being supported by thin laths.

As the summer approaches, the wine begins to show signs of fermentation, which increases with the hot weather. When the fermentation reaches such a stage as to cause the wine to occupy the previously unfilled space in the neck of the bottle, a large number of bottles begin to burst, as well as to leak; and in some years as much as 30% of the wine is lost from these causes. Two courses, each of which requires to be promptly adopted, are open to the wine maker under these circumstances. Either he must remove the wine to a cooler cellar, or uncork the bottles. Sometimes, if the breakage, or *casse*, as it is termed, has not exceeded 7% or 8% by the time August is reached, he takes the chance of further loss, and lets the wine remain, for with the fall in temperature, which usually occurs in September and October, the energetic action of the wine ceases, and the breakage also.

The leaky and broken bottles are then removed from the sound ones, which are restacked and left until a yeasty substance has discontinued depositing upon their lower sides. The bottles are kept in this condition until required for sale. Before, however, they are in a fit state for the purchaser, the yeasty matter has to be removed, and the wine to be liqueured. The yeast is got rid of as follows: The bottles are placed necks downward, on perforated shelves arranged in rows. A workman then seizes a bottle, and holding it in the inverted position, by a dexterous movement discharges the yeast from the side and brings it down upon the cork. This operation, which extends over some weeks, has to be repeated from time to time, until the supernatant wine is quite clear. The bottles are then very cautiously removed from the cellars to the corking and tying down rooms, when they come into the hands of a workman called a disgorger. The disgorger, holding the bottle still neck downward, proceeds to liberate the cork, by slipping off the *agrafe*, and when the cork is three parts out he quickly inverts the bottle. The cork is then forcibly ejected with a loud report by the froth, which carries with it the greater part of the yeast and other solid matters, what remains of these being got rid of by the workman working his finger round the neck of the bottle, whereby they are detached, and forced out by the still rising froth. The workman then places his thumb over the mouth of the bottle, which is afterward temporarily closed with an old cork.

The liqueur, which is next to be added, is of very varied composition, as almost every champagne maker has his favorite and special preparation.

The best liqueurs are made of some choice wine, mixed with the purest cane sugar. The inferior kinds consist of a mixture of 90% alcohol, sugar and some flavoring material. A certain measured quantity of the liqueur is added to each bottle of wine. The bottle is then corked, wired, tied down and washed, and the cork covered with tin foil and labeled. It is then ready for sale and export. It sometimes happens that after the previous round of operations has been gone through, the champagne becomes turbid, and a minor second fermentation sets in. In this case, it is made to undergo a repetition of the processes already described. It is a desideratum with every champagne maker that when the bottle is opened for its contents to be drunk, the removal of the cork should be accompanied with a full, deep, and distinct report. When, instead of this, the report is short and sharp, and resembles a popping noise, this is owing to the space between the liquid and the cork, filled with the gas, being too small. When the gas escapes with a hissing noise, it is because the cork fits the neck of the bottle unequally, or has not been driven in in a perfectly straight direction. The good name of any maker would be seriously damaged were he to send out champagne liable to comport itself in this manner. He therefore spares no expense in providing himself with the very best and soundest corks. The best way to prevent the escape of the gas from the bottle is always to keep the bottles lying on their sides.

All effervescing wines are manufactured in a similar manner to champagne.

Since the alcohol in the wine is derived from the sugar contained in the must, it would seem that the sweetest and ripest grapes should yield the strongest product. When the decomposition of the sugar has been complete, this will be the result; but it frequently happens that, owing to an insufficiency in the must of the protein compounds which nourish the yeast cells (the *torula cerevisiæ*), by the agency of which the fermentation is accomplished, the whole of the sugar is not converted into alcohol, in which case a sweet wine will be produced; or the sweetness may be due to the alcohol formed stopping the fermentation before all the sugar had been decomposed, or to an excess of glycerin. If on the other hand, the grape juice is rich in albuminous matter, but poor in sugar, the consequent wine will be what is termed a dry one. Such are the red wines of France and the Rhine.

According to Wagner, red French wines contain 9 to 14% by volume of alcohol. Burgundy, 9, 10, and 11%. Bordeaux, 10, 11, and 12%. Other French wines contain 8 to 10%; the wines of the Palatinate, 7 to 9·5%; Hungarian wines, 9 to 11%. Champagne contains 9 to 12%; Xeres, 17%; Madeira, 17 to 23·7%

Table Showing the Quantity of Alcohol in Wine.

Names, etc.		Alcohol of 0·7937 per cent. by weight.	Proof spirit per cent. by volume.
Port	Weakest	14·97	31·31
	Mean of 7 samples	16·20	34·91
	Strongest	17·10	37·27
	White	14·97	31·31
Sherry	Weakest	13·98	30·84
	Mean of 13 wines, excluding those very long kept in cask	15·37	33·59
	Strongest	16.17	35·12
	Mean of 9 wines long kept in cask in the East Indies	14·72	31·30
	Madre da Xeres	16·90	37·06
Maderia	Long kept in cask in the East Indies — Strongest	16·90	37·06
	Long kept in cask in the East Indies — Weakest	14·09	30·86
Teneriffe (long in cask at Calcutta)		13·84	30·21
Cercial		15·45	33·65
Lisbon (dry)		16·14	34·71
Shiraz		12·95	28·30
Amontillado		12·63	27·60
Claret (a first growth of 1811)		7·72	16·95
Chateau-Latour (a first growth of 1825)		7·78	17·06
Rosan (second growth of 1825)		7·61	16·74
Ordinary Claret (Vin Ordinaire)		8·99	18·96
Rivesaltes		9·31	22·35
Malmsley		12·86	28·17
Rüdesheimer, first quality		8·40	18·44
Rüdesheimer, inferior		6·90	15·19
Hambacher, superior quality		7.35	16·15

—*Dr. Christison.*

In addition to ethylic alcohol and water, which, as shown in the previous table, vary largely in the proportions in which they are present in different kinds of wine, most wines contain the following substances: Propylic, butylic, caprylic and caproic alcohols; acetic and œnanthic ether; grape sugar(dextrose and levulose); glycerin; gums; pectin; coloring and fatty substances; protein bodies; carbonic acid, ordinary and levo-tartaric and racemic acids; citric acid; malic acid; tannic acid; acetic acid; lactic acid; succinic acid; organic and inorganic salts.

Of these, the propylic and butylic, caprylic, and caproic alcohols, the ethers, the glycerin, the carbonic, acetic, lactic, and succinic acids are produced during fermentation, the remaining substances being original constituents of the grape juice, which also contains bitartrate of potash; but this being insoluble in weak spirit, is thrown down or deposited as the conversion of sugar into alcohol proceeds. In its crude condition, it is known as argol, and is the source of cream of tartar and tartaric acid. As a result of its formation in the grape a considerable amount of free acid is removed from the fruit. This is why wine made from grapes is so much superior, and keeps so much better than that manufactured from fruits that abound instead in citric and malic acids. These latter require the addition of large quantities of sugar to disguise their acidity, a proceeding which frequently gives rise in them to a second fermentation, and often to the consequent formation of acetic acid. The acetic ether in wine is produced by the mutual reaction of acetic acid and ethylic alcohol. Neubauer, dissenting from Dupré and Thudichum, says the œnanthic ether is the constituent to which wines owe their bouquet. He regards this ether as a combination of various substances of which caprylic and caproic acid ethers are the most important. Their formation is believed to take place partly during and partly after fermentation. The rest of the non-volatile constituents, such as the sugar, the gum, the protein bodies, coloring matter, inorganic salts, etc., which remain behind when a wine is evaporated to dryness, constitute, with a certain quantity of substance the composition of which has not been defined, the extractive matter.

The amount of extractive matter in wines varies as greatly as from 1% to 20%. This difference occurs even in wines of a similar character, and from the same district. Thus in Rhine wines it ranges from 10·6% to 4·2%, in the Palatinate wines, from 10·7% to 1·9%, in Bohemian wines, the mean is 2·26%, in the wines of Austria, 2·64%, and in those of Hungary, 2·62%. It is highest in sweet wines. In many adulterated wines, as the extractive matter is either very small or sometimes altogether absent, it has been proposed to employ the estimation of its amount in a wine as a test of its genuineness or the reverse.

Light wines owe their color, varying from pale yellow to brown, possibly to oxidized extractive matter, or to the cask. The color of red wine is due to the action of its free tartaric acid on a blue substance residing in the skin of the grape. This body, which is known to wine makers as wine blue, and which bears a great resemblance to litmus, in turning red when acted upon by acids, was named *œnocyan* or *œnocyamin*, by Mulder or Maumené. It is insoluble in water, alcohol, ether, olive oil, and oil of turpentine, but is dissolved by alcohol containing small quantities of tartaric or acetic acid. Glycerin was found to be a normal constituent of wine by Pasteur in 1859. As the wine matures, the glycerin disappears. In Austrian wines, Pohl found 2·6% of glycerin. In some wines it reaches 3%, but in most it seldom exceeds 1%. In old wines it exists only in very small quantity. Faure states that another normal constituent of wine is a gum, to which is given the name *œnanthin*.

The ash of wine, as might be expected, contains the same fixed constituents as that of the grape juice, and in both the potash and phosphoric acid largely predominate.

As the excellence and character of a wine depend, in addition to its peculiar bouquet, upon the relative proportions of alcohol, free acid, and water, and as these are approximately constant in all wines of good quality, it is essential that the grape juice should not only contain such an amount of sugar as when fermented will yield the requisite quantity of alcohol (but since the goodness of the wine is inversely as its content of free acid), that the latter should not exceed a certain limit. The taste of a wine, however, is frequently a fallacious test as to the quantity of free acid in it. Of two wines, one containing more free acid than the other, the latter may be less sour to the palate, provided it contains a larger proportion of sugar, glycerin, or alcohol than the former.

Apart from the consideration, whether the acid of the grape eventually becomes transformed into sugar or not, the fact remains that in sunless and wet years, when the fruit has not sufficiently ripened, there is a deficiency of sugar, and an access of acid. Fresenius states that the proportions are in—

Grapes grown in a very inferior year as 1 part of acid to 12 parts of sugar. Grapes grown in a better year as 1 part of acid to 16 parts of sugar. Grapes grown in a good year as 1 part of acid to 24 parts of sugar.

According to the same authority, when the proportion reaches 1 part of acid to 10 parts of sugar the grape is unsuited for making wine.

To get over the difficulty of dealing with a must that contains too low a proportion of sugar and too high a one of acid, two methods are adopted by the wine maker. The first, which was proposed by Chaptal, in an essay on the cultivation of the grape, published so long ago as 1800, consists in adding raw sugar to the must, in quantity sufficient to yield the amount of alcohol in which the wine would be otherwise deficient. Chaptal calculated that 2 parts of sugar would give 1 part of alcohol. If, therefore, the grape juice should be found upon analysis capable of producing a wine with only 8% of alcohol, instead of its normal amount, say, of 16% after fermentation for every 100 parts of wine to be manufactured, 16 parts of sugar would have to be added. When the amount of free acid in the must exceeds 6 parts in 1,000, powdered marble is added, in the proportion of 50 parts of marble for every 60 parts of acid in excess. This method is inapplicable if the acid exists as acetic.

By Gall's method, when the free acid in the must exceeds 0·6%, the juice is diluted with water to that strength. In this case the percentage of sugar will also have been reduced. Gall believed a normal must should have the following composition:

Sugar	24·0%
Free acid	0·6%
Water	75·4%

One hundred parts by weight of such a must would therefore contain 24 parts of sugar, 0·6 part of free acid, and 75·4 parts of water. If by examination a sample of grape juice should be found to contain, say, 16·7% of sugar and 0·8% of free acid, to bring it up to Gall's standard, it would be necessary to add to every 1,000 lb. of such juice 153 lb. sugar and 180 lb. of water.

Grape sugar made from starch and dilute sulphuric acid is usually employed for this purpose, but such sugar has the objection of containing large quantities of dextrin, the presence of which injures the keeping power of the resulting wine. The wine produced by Gall's plan is said to be very pleasant, and not devoid of natural bouquet. Sometimes the wine maker adds a flavoring material to it. The process seems best adapted for those musts which are poor in sugar, but contain an excess of free acid. The removal of this may also be satisfactorily accomplished by the use of neutral tartrate of potash. Among other methods practiced for increasing the alcoholic content of wine, is that of submitting it to a temperature at or below freezing, whereby a considerable quantity of its water becomes congealed, and may be separated along with some tartar, and coloring and albuminous matters, which are precipitated by the cold. Owing to the removal of these last from the wine, it is not so liable to undergo a second fermentation, while the abstraction of part of its water, of coun makes it richer in alcohol.

Gypsum is also frequently added to wines f the purpose of withdrawing some of their w ter, and therefore of increasing their streng This it does, but only to a trifling extent. A the same time, it should be remembered th its addition to wine gives rise to the formati of soluble sulphate of potash, a bitter and a tive purgative, and wholly or partly remov the tartaric acid and the phosphates. Dup and Thudichum have shown by experimen that this practice of plastering, as it is calle also reduces the yield of the liquid, as a co siderable part of the wine mechanically com bines with the gypsum and is lost.

Another reprehensible practice is the add tion to the wine of brandy or of alcohol.

General Formulæ for the Preparation of Im tation Wines.—1. From ripe saccharine fruits. Take of the fruit, 4 to 6 lb.; clear soft water, gal.; sugar, 3 to 5 lb.; cream of tartar (dissolv in boiling water), 1¼ oz.; brandy, 2 to 3%; flavo ing as required. If the full proportions of fru and sugar are used, the product will be goo without the brandy, but better with it. 1½ raisins may be substituted for each pound sugar.

In the above manner are made the followi wines: Gooseberry wine, currant wine (re white, or black), mixed fruit wine (currants a gooseberries, or black, red, and white curran ripe black heart cherries and raspberries (equ parts), a good family wine; cherry wine, co press's wine (from apples and mulberries, equ parts), elder wine, strawberry wine, raspber wine, mulberry wine, whortleberry or bilber wine; blackberry wine, damson wine, morel wine, apricot wine, apple wine, grape wine, et

2. From dry saccharine fruit (such as raisins —Take of the dried fruit, 4½ to 7½ lb.; cle soft water, 1 gal.; cream of tartar (dissolved), oz.; brandy, 1½ to 4%. Should the dried fru employed be at all deficient in saccharine ma ter, 2 to 3 lb. of it may be omitted, and ha that quantity of sugar or two- thirds of raisi added. In the above manner are made da wine, fig win, raisin wine, etc.

3. From acidulous, astringent, or scarce ripe fruits, or those which are deficient in sa charine matter.—Take of the picked fruit, to 3½ lb.; sugar, 3½ to 5½ lb.; cream of tart (dissolved), ½ oz.; water, 1 gal.; brandy, 2 to 6

In the above manner are made gooseberr wine, bullace wine, damson wine.

4. From footstalks, leaves, cuttings, etc. By infusing them in water, in the proportio of 3 to 6 lb. to the gal., or q. s. to give a prop flavor, or to form a good saccharine liquid; an adding 2½ to 4 lb. of sugar to each gal. o strained liquor. One and a half lb. of raisin may be substituted for each lb. of sugar.

In the above manner are made grape wi (from the pressed cake of grapes), Engli grape wine, rhubarb wine (from garden rh barb), celery wine, etc.

5. From saccharine roots and stems plants.—Take of the bruised, rasped, or slic vegetable, 4 to 6 lb.; boiling water, 1 gal.; in fuse until cold, press out the liquid, and to ea gal. add of sugar 3 to 4 lb.; cream of tartar, oz.; brandy, 2 to 5%. For some roots and ste the water must not be very hot, as they a thus rendered troublesome to press.

In the above manner are made beet-root wine, parsnip wine, turnip wine, etc.

6. From flowers, spices, aromatics, etc.—These are prepared by infusing a sufficient quantity of the bruised ingredient for a few days in any simple wine (as that from sugar, honey, raisins, etc.), after the active fermentation is complete, or, at all events, a few weeks before racking them.

In the above manner are made clary wine (muscatel) (from flowers, 1 qt. to the gal.); cowslip wine (from flowers, 2 qt. to the gal.); elder flower wine (flowers of white berried elder, ¾ pt., and lemon juice, 3 fl. oz. to the gal.); ginger wine (1¼ oz. ginger to the gal.); orange wine (1 dozen sliced oranges per gal.); lemon wine (juice of 12 and rinds of 6 lemons to the gal.); spruce wine (¼ oz. of essence of spruce per gal.); juniper wine (berries, ¾ pt. per gal.); peach wine (4 or 5 sliced, and the stones broken, to the gal.); apricot wine (as peach wine, but with more fruit); quince wine (12 to the gal.); rose clove gillyflower, carnation, lavender, violet, primrose, and other flower wines (distilled water from the flowers, 1½ pt., or flowers 1 pt. to the gal.); mixed fruit wine; pine apple wine; cider wine; elder wine; birch wine (from the sap, at the end of February or beginning of March): sycamore wine (from the sap); malt wine (from strong wort); and the wines of any of the saccharine juices of ripe fruit.

7. From saccharine matter.—Take of sugar, 3 to 4 lb., cream of tartar, ½ oz.; water, 1 gal.; honey, 1 lb.; brandy, 2 to 4 per cent. A handful of grape leaves or cuttings, bruised, or 1 pt. of good malt wort, or mild ale, may be substituted for the honey. Chiefly used as the basis for other wines, as it has little flavor of its own.

In all the preceding formulæ lump sugar is intended when the wines are required very pale, and good Muscovado sugar when this is not the case. Some of the preceding wines are improved by substituting good cider, perry, or pale ale or malt wort, for the whole or a portion of the water. Good porter may also be advantageously used in this way for some of the deep colored red wines. When expense is no object, and very strong wines are wanted, the expressed juices of the ripe fruits, with the addition of 3 or 4 lb. of sugar per gal., may be substituted for the fruit in substance, and the water.

Management of Wine. — The remarks arranged under this heading are more particularly intended for the use of the dealer, the publican, and the private individual; as those which precede it are for the wine maker; matters common to each class will, however, be found in both sections of the present article.

Age.—The sparkling wines are in their prime in from eighteen to thirty months after the vintage. Thin wines, of inferior growths, should be drank within twelve or fifteen months, and be preserved in a very cool cellar. Sound, well fermented, full bodied still wines are improved by age, with reasonable limits, provided they be well preserved from the air, and stored in a cool place having a pretty uniform temperature.

Bottling.—The secret of bottling wine with success consists in the exercise of care and cleanliness. The bottles should be sound, clean and dry, and free from the least mustiness or other odor. The corks should be of the best quality, and immediately before being placed in the bottles should be compressed by means of a cork squeezer, or of one of the numerous machines made for this purpose. For superior or very delicate wines, the corks are sometimes prepared by placing them in a copper or tub, covering them with weights to keep them down, and then pouring over them boiling water holding a little pearlash in solution. In this liquid they are allowed to remain for twenty-four hours, when they are well stirred about in the liquid, drained and reimmersed for a second twenty-four hours in hot water, after which they are well washed and soaked in several successive portions of clean and warm rain water, drained, dried out of contact with dust, put into paper bags, and hung up in a dry place for use. Many wine merchants, however, disapprove of this course, and merely dip the corks in clean cold water before inserting them in the bottles. The wine should be clear and brilliant, and if it be not so, it must undergo the process of fining before being bottled. The bottles, corks and wine, being ready, a fine clear day should be preferably chosen for the bottling, and the utmost cleanliness and care should be exercised during the process. Great caution should also be observed to avoid shaking the cask, so as not to disturb the bottoms. The remaining portion that cannot be drawn off clear should be passed through the wine bag, and, when bottled, should be set apart as inferior to the rest; or the lees are collected in a cask kept for the purpose, and the clear wine resulting from their subsidence is used for filling up casks about to be fined. The coopers, to prevent breakage and loss, place each bottle, before corking it, in a small bucket or boot having a bottom made of soft cork or leather, which is strapped on the knee of the bottler. The bottlers seldom break a bottle, though they flog in the corks very hard. The bucket or boot is now very largely supplanted by Gervaise's corking machine, an apparatus which first submits the cork to great pressure, and then immediately afterward drives it firmly into the neck of the bottle, in which, owing to its subsequent expansion, it fits very closely and perfectly. When the process of bottling is complete, the bottles of wine are stored in a cool cellar on their sides, but on no account in an upright position. Sometimes they are placed in damp straw, or in sweet, dry sawdust or sand.

Alcoholizing.—Alcohol is frequently added to weak or vapid wines, to increase their strength or to promote their preservation. In Portugal, ½ of alcohol is commonly added to port before shipping it for England, as without this addition it generally passes into the acetous fermentation during the voyage. A little alcohol is also usually added to sherry before it leaves Spain. The addition of alcohol to wine injures its proper flavor, and hence it is chiefly made to port, sherry, and other wines, whose flavor is so strong as not to be easily injured. Even when alcohol is added to wines of the latter description, they require to be kept for some time to recover their natural flavor.

Cellaring.—A wine cellar should be dry at bottom, and either covered with good hard gravel or be paved with flags. Its gratings or windows should open toward the north, and it should be sunk sufficiently below the surface to insure an equable temperature. It should also be sufficiently removed from any public throughfare so as not to suffer vibration from the passing of carriages. Should it not be in a position to maintain a regular temperature, arrangements should be made to apply artificial heat in winter and proper ventilation in summer. The temperature should range from 55° to 65° F. For Burgundies the former temperature is the more suitable; for ports, sherries and strong wines, the latter temperature.

Decanting.—In decanting wine, care must be taken not to shake or disturb the crust when moving it about or drawing the cork, particularly of port wine. Never decant wine without a wine strainer, with some clean fine cambric in it, to prevent the crust and bits of cork going into the decanter. In decantiug port wine, do not drain it too close; as there are generally two thirds of a wineglassful of thick dregs in each bottle, which ought to be rejected. In white wine there is not much deposit; but it should nevertheless be poured off very slowly, the bottle being raised gradually.

Detartarization.—Rhenish wines, even of the best growths, and in the finest condition, besides their tartar, contain a certain quantity of free tartaric acid, on the presence of which many of their distinctive properties depend. The excess of tartar is gradually deposited during the first years of the vatting, the sides of the vessels becoming more and more encrusted with it; but, owing to the continual addition of new wine and other causes, the liquid often gains such an excess of free tartaric acid as to acquire the faculty of redissolving the deposited tartar, which thus again dissappears after a certain period. The taste and flavor of the wine are thus exalted, but the excess of acid makes the wine less agreeable, and probably less wholesome.

Under these circumstances the best corrective is pure neutral tartrate of potash. When this salt, in concentrated solution, is added to an acid wine, the free acid combines with the neutral salt, and separates from the liquid under the form of the sparingly soluble bitartrate of potash. If to 100 parts of a wine which contains 1 part of free tartaric acid we add 1½ parts of neutral tartrate of potash, there will separate on repose at 70° to 75° F., 2 parts of crystallized tartar; and the wine will then contain only ½ part of tartar dissolved, in which there are only 0·2 part of the original free acid; 0·8 part of the original free acid having been withdrawn from the wine. This method is particularly applicable to recent must and to wines which contain little, if any, free acetic acid; when this last is present, so much acetate of potash is formed as occasionally to vitiate the taste of the liquid.

Fining.—Wine is clarified in a similar manner to beer. White wines are usually fined by isinglass. The quantity of isinglass varies with the quality and condition of the wine, and is regulated by the experience of the cellarman. Stout wines require a larger amount than thin ones. Even with stout ones it ought not to exceed ½ oz. to the hogshead. The Rhenish wines do not require more than ¼ oz., and the hocks still less. The choicest Russian isinglass only should be employed. It should be dissolved in cold water, and thinned with wine. Red wines are generally fined with the whites of eggs, in the proportion of 15 to 20 to the pipe. Sometimes, but rarely, hartshorn shavings, or pale sweet glue, is substituted for isinglass.

Flatness.—This is removed by the addition of a little new brisk wine of the same kind; or by rousing in 2 or 3 lb. of honey; or by adding 5 or 6 lb. of bruised sultana raisins and 3 or 4 qt. of good brandy, per hogshead. By this treatment the wine will usually be recovered in about a fortnight, except in very cold weather. The process may be expedited, if a tablespoonful or two of yeast be added, and the cask removed to a warmer situation.

Insipidity. See Flatness.

Maturation. — The natural maturation or ripening of wine and beer by age depends upon the slow conversion of the sugar which escaped decomposition in the gyle tun or fermenting vessel into alcohol. This conversion proceeds most perfectly in vessels which entirely exclude the air, as in the case of wine in bottles; as when air is present, and the temperature sufficiently high, it is accompanied by slow acetification. This is the case with wine in casks, the porosity of the wood allowing the very gradual permeation of the air. Hence the superiority of bottled over draught wine or that which has matured in wood. Good wine, or well fermented beer, is vastly improved by age when properly preserved; but inferior liquor, or even superior liquor, when preserved in improper vessels or situations, becomes acidulous from the conversion of its alcohol into vinegar. Tartness or acidity is consequently very generally, though wrongly, regarded by the ignorant as a sign of age in liquor. The peculiar change by which fermented liquors become mature or ripe by age is termed the insensible fermentation. It is the alcoholic fermentation impeded by the presence of the already formed spirit in the liquor, and by the lowness of the temperature.

Mould or fungus is very frequently produced by keeping the wine in too warm a cellar, or in a cask not filled to the bung hole, or else in one from which the bung has been left out. As it forms mostly on weak wines, its presence may be referred to a deficiency of alcohol.

The best method for its removal is either burning sulphur in a partially filled cask, or drawing off the wine into a fresh cask, in which sulphur has been previously burnt. It is advisable that wines so treated should be drunk as soon as possible.

Wine sometimes has an unpleasant musty taste, which it has acquired from being put into a dirty cask, or into one that has been unused for some time. This bad flavor, which is known as caskiness, may generally be removed by vigorously agitating the wine for some time with a little sweet, olive, or almond oil. The cause of the bad taste is the presence of an essential oil, which the fixed oil combines with and carries to the surface, whence it may be skimmed off, or the wine lying under it may be drawn off. A little coarsely powdered and freshly burnt charcoal, or some slices of bread toasted until they become black, or a little bruised mustard seed, sometimes effects the removal of the objectionable taste.

Ripening.—To promote the maturation or ripening of wine, various plans are adopted by the growers and dealers. One of the safest ways of hastening this, especially for strong wines, is not to rack them until they have stood 15, or 18 months upon the lees; or, whether crude or racked, keeping them at a temperature ranging between 55° and 65° F., in a cellar free from draughts and not too dry. Full or heavy sherries or ports, when bottled and treated in this manner, ripen very quickly in a temperate situation.

Racking.—Racking should be performed in cool weather, and preferably early in the spring. A clean siphon, well managed, answers better for this purpose than a cock or faucet. The bottoms, or thick portion, may be strained through a wine bag, and added to some other inferior wine.

Ropiness, Viscidity; *Graisse.* — This arises from the wine containing too little tannin or astringent matter to precipitate the gluten, albumen, or other azotized substance, occasioning the malady. Such wine cannot be clarified in the ordinary way, because it is incapable of causing the coagulation or precipitation of the finings. The remedy is to supply the principle in which it is deficient. M. François, of Nantes, prescribes for this purpose the bruised berries of the mountain ash in the proportion of 1 lb. to the barrel. A little catechu, kino, or, better still, rhatany, or the bruised footstalks of the grape, may also be conveniently and advantageously used in the same way. For pale white wines, which are the ones chiefly attacked by the malady, nothing equals a little pure tannin or tannic acid dissolved in proof spirit.

Second Fermentation; *La-pousse.* — Inordinate fermentation, either primary or secondary, in wine or any other fermented liquid, may be readily checked by sulphuration, or by the addition of sulphur, mustard seed, or sulphite of lime. The latter must, however, be used with discretion.

Sparkling, Creaming and Briskness.—These properties are conveyed to wine by racking it into closed vessels before the fermentation is complete, and while there still remains a considerable portion of undecomposed sugar. Wine which has lost its briskness may be restored by adding to each bottle a few grains of white lump sugar or sugar candy. The bottles are afterward inverted, by which means any sediment that forms falls into the necks, when the corks are partially withdrawn, and the sediment is immediately expelled by the elastic force of the compressed carbonic acid. If the wine remains muddy, a little solution of sugar and finings are added, and the bottles are again placed in a vertical position, and, after two or three months, the sediment is discharged as before.

Ages of Different Wines when at Their Prime. See also the Management of Wine above.—The age named below for each wine will be found to be that at which it possesses its fullest flavor and when it will be best to drink it.

Port	20	years.
Madeira	10	years.
Sherry	10	years.
Red Madeira	6	years.
Madeira-malmsey	5	years.
Callavella	4	years.
Malaga	3	years.
Muscatel	3	years.
Red hermitage	20	years.
White hermitage	20	years.
Roussillon	20	years.
Rivesaltes	20	years.
Banyuls	20	years.
Collioure	15	years.
Salces	10	years.
La Palme	10	years.
Sigean	8	years.
Carcassone	8	years.
Beziers	8	years.
Lunel	8	years.
Champagne	6	years.
Montpellier	5	years.
Frontignan	5	years.

Acid Taste of Wines, to Remove.—Neutralize the excess of acid by powdered chalk.

Alcoholizing Wine. See *Management of Wine.*

Apple Wine.—1. Finest cider, 60 gal.; brown sugar, ½ cwt.; bitter almonds, ¼ oz. Mix the cider and sugar, and ferment; then rack the mixture, and put into the cask the almonds, with 16 or 18 cloves, and 3 or 4 pieces of bruised ginger. When fine, bottle it and keep it in a cool place. The addition of a small piece of lump sugar to each bottle will make the cork fly out, as from champagne; but do not add this unless you have a very cold cellar to keep it in.

2. Forty lb. sugar, 15 gal. cider. The cider must be pure and made only from really ripe, sound apples (this is important). If the wine is to be quite sweet, add another 10 lb. of sugar, and put all into the cider, letting it stand till dissolved. Put the liquor into a cask but leave it unfilled to the extent of 2 gal. Put the cask into a cool position, with the bung out for forty-eight hours. After this bung it up, but let there be a small vent somewhere—in the bung would do—until the fermentation is over. Then bung up securely, and the wine will be ready for consumption in twelve months. There is no racking required in the manufacture of this wine. To remain in the cask twelve months. Make this in January or February.

Apricot Wine.—Twelve lb. ripe apricots, 6 oz. loaf sugar to each qt. liquor. Wipe the apricots, cut them in pieces and let them boil in 2 gal. water. After boiling, let them simmer till the liquor is strongly impregnated with the flavor of the fruit. Strain through a hair sieve, and put 6 oz. lump sugar to every qt. liquor. Boil again, skim very carefully, and as soon as no more scum appears, put it into an earthen pan. Bottle next day if it is quite clear, and put 1 lump of sugar into each bottle. It should be fine wine in six months. Two hours to boil. Make this in August or September.

Balm Wine.—1. Into 8 gal. of water put 20 lb. of moist sugar; boil for two hours, skimming thoroughly; then pour into a tub to cool; place 2½ lb. of balm tops, bruised, into a barrel with a little new yeast; when the liquor is cold pour it on the balm; stir it well together, and cork down well and keep in bottle at least a year.

2. Put a peck of balm leaves into an open tub; pour on them 4 gal. of boiling water; cover up the tub and let them infuse for twelve or fourteen hours; strain the liquor at the end of that time through a hair sieve, and to every gallon add 2 lb. of good moist sugar, stirring well for twenty minutes; take the whites of 4 eggs, whisk them over the fire in a saucepan; remove it from the fire as the scum rises, and skim the latter off; then add it to the liquor; boil the whole for three quarters of an hour, letting it work three or four days before you tun it; bung down, and when fine, bottle it off; in six or eight months it will be fit to drink.

let it stand twenty-four hours, stirring it frequently; then close it up tightly at first, and more securely after fermentation has quite ceased; when it has stood two months, bottle off, putting a lump of sugar into each bottle;

Bilberry Wine.—The fruit should be picked on a very dry day, when it is quite ripe. The leaves and stalks must be carefully removed from the berries and the fruit, then weighed. To 4 gal. of fruit allow either 6 gal. of cold water or else 3 gal. of water and 3 gal. of cider, and 10 lb. of good moist sugar; let all these ingredients ferment in an open tub until working is over; then add ½ gal. of brandy, a handful of lavender and rosemary leaves mixed, 2 oz of powdered ginger, and 2 oz. of powdered tartar; let the liquor rest after this addition for forty-eight hours, then strain very carefully through a hair sieve into a perfectly clean cask, laying the bung lightly on the bung hole until the working is quite over; and no hissing sound is heard; then close down quite tightly, and bottle off at the end of three months; keep six or eight months in bottle before use.

Blackberry Wine.—1. To 1 gal. of mashed blackberries add a quart of boiling water; let it stand for twenty-four hours, or nearly as long, then strain through a coarse bag or towel, adding 3 qt. of water and 2 lb. of brown sugar to each gallon of the mixture, making equal parts of water and juice; mix well, then put in demijohns, stone jugs or a tight, clean keg; close partially and put in a cool place; if in a warm place or left entirely open it will sour; if stopped entirely tight it will burst the vessel—but cork left loosely in; let it stand until fermentation ceases, which will be about October; then bottle, and this makes excellent wine and a fine medicinal drink for summer affections.

2. The following is said to be an excellent receipt for the manufacture of superior wine from blackberries: Measure your blackberries, and bruise them; to every gallon add 1 qt. of boiling water; let the mixture stand twenty-four hours, stirring occasionally; then strain off the liquor into a cask; to every gallon add 2 lb. of sugar; cork tight, and let stand about one year, and you will haye wine fit for use, without any further straining or boiling. This wine is very highly recommended for household use.

Bottling of Wine. See *Management of Wine.*

Catawba Champagne.—Twenty gal. Catawba, 1 qt. Cognac brandy, and 2 gal. champagne syrup.

Cellaring Wine. See *Management of Wines.* Also *Laying Down Wines*, below.

Champagne, Imitation.—

1.	Prepared cider	25	gal.
	Citric acid	5	drm.
	Simple syrup	1¼	pt.
	Water	1¼	gal.
	Spirits (10 under proof)	2½	gal.
	Tartaric acid	1¼	oz.

Let this stand twelve days, then fine and bottle, if it is frothing and sparkling; if not, add more acid; and fine again. Add to each bottle about 2 teaspoonsful of syrup, made by dissolving ½ lb. rock candy in 1 pt. white wine.

2. Cider, pale, 1 hogshead; spirit, 3 gal.; honey or sugar, 20 lb. Mix and allow to remain two weeks; then fine with skimmed milk, ½ gal. This will be very pale.

3. Cheap Champagne.—

Bordeaux	10	gal.
Bodenheimer or Hockheimer	10	gal.
Water	10	gal.
French spirit	1	gal.
Syrup	3	gal.

Made of 18 lb. sugar and 6 qt. water.

4. Champagne, Gooseberry.—Ferment together 5 gal. white gooseberries, mashed, with 4½ gal. water. Add 6 lb. sugar, 4½ lb. honey, 1 oz. finely powdered white tartar, 1 oz. dry orange and lemon peel, and ½ gal. white brandy. This will produce 9 gal. Before the brandy is added, the mixture must be strained and put into a cask.

5. *Champagne Liqueur.*—

Fine loaf sugar	13	lb.
Water	1½	gal.

Boil together. While boiling, add by degrees 3 qt. alcohol, 90%, filter. Add to the following compound:

6. Louis Röederer.—Mix the champagne liqueur with 11¼ gal. white wine; 1½ bottle cognac; 6 drops sulphuric ether, dissolved in the cognac.

7. Champagne, Syrup for.—Dissolve 12' lb. white sugar in 1 gal. water, and add the whites of 2 eggs. Heat until it candies. Strain through flannel.

Cherry Wine.—Take of cold soft water, 10 gal.; cherries, 10 gal.; ferment. Mix raw sugar, 30 lb.; red tartar, in fine powder, 3 oz.; add brandy, 2 or 3 qt. This will make 18 gals. Two days after the cherries have been in the vat, we should take out about 3 qt. of the cherry stones, break them and the kernels, and return them into the vat again.

Black Cherry Wine.—24 lb. of small black cherries, 2 lb. of sugar to each gal. of liquor.

Bruise the cherries, but leave the stones whole, stir well, and let the mixtnre stand 24 hours, then strain through a sieve, add the sugar, mix again, and stand another 24 hours. Pour away the clear liquor into a cask, and when fermentation has ceased, bung it closely. Bottle in 6 months' time. It will keep from 12 to 18 months.

Time.—To remain in the cask six months. Make this in July or August.

Claret.—

1.	Prepared cider	30	gal.
	Good port wine	6	gal.
	Water	1½	gal.
	Tartar	1½	lb.
	Syrup	1½	pt.
	Citric acid	2¼	drm.
	Raisins	3	lb.

Color if desired with red sanders or red beet juice. Let it stand 10 to 12 days, rack.

2. Good cider and port wine, equal parts.

3. To each gallon of the last add cream of tartar (genuine) 3 drm., and the juice of one lemon.

4. To either of the preceding add French brandy, 2 oz.

5. Instead of port, use red cape or British port.

If the first three of the above are well mixed and fined down, and not bottled for a month or five weeks, they can scarcely be distinguished from good Bordeaux. A mixture of 4 parts of raisin wine with 1 part each of raspberry, and barberry or damson wine, also forms an excellent factitious claret.

Coca Wine.—This is a French preparation. Its strength is about 1 in 30, and the dose a wineglassful. Coca wine is, roughly speaking, about one-sixth of the strength of the official liquid extract (*Extractum Cocæ Liquidum* B. P., or *Extractum Erythroxyli Fluidum* U. S.). To obtain the liquid extract, coca leaves are exhausted by percolation (which differs from either decoction or infusion) with proof spirit. At the termination of the process, the strength should be adjusted so that 1 oz. = 1 of leaves. The process of percolation is as follows: The leaves are placed in a vessel very like an elongated funnel, closed at its base by a porous diaphragm. This funnel fits into a receiver, and a small tube passes up its outer side and enters it near the top, forming a means of communication between the two. Spirit is now poured on the leaves, and the percolator closed. As the percolate filters slowly through into the reservoir, the displaced air passes up the tube, and so maintains an equilibrium in both vessels. The virtue of the coca leaves lies principally in the presence of the alkaloid cocaine. This, in the dried leaves, is supposed to exist as an inert salt, similar to many of the cinchona alkaloids in bark.

Coloring Matters Used to Color Wine.—Various matters are largely employed to artificially heighten the colors of wines. The different spurious coloring matters can be detected by using a solution of lead acetate, and the precipitates formed give a good test by which the various colors can be determined.

1. Malva flowers or hollyhock produce, when steeped in spirits for 24 hours, or even when boiled with water, a very beautiful purple.

2. The pokeberry (the dark berries from the plant growing all over the United States) has a very dark red color.

3. Whortleberry, huckleberry, elderberry, blackberry and mulberry.

4. Cochineal gives a fine red color by boiling finely ground cochineal with cream of tartar.

5. Brazil wood, sanders wood and logwood. These woods are boiled in water, and the decoctions yield shades of color from red to blue.

6. Orchil produces a beautiful purple.

7. Red beets and carrots produce likewise a good color.

8. Indigo solution, neutralized by potash, produces a fine blue.

9. Annatto and extract of safflower produce a beautiful yellow.

10. Red cabbage produces a beautiful bluish red.

11. Turmeric is the most common color for yellow, as the spirit extracts all color immediately; as also quercitron bark.

12. Garacine (extract of madder) produces various shades of red.

13. Tincture of saffron (Spanish saffron) for yellow.

14. Blue vitriol, or solution of indigo, produces blue.

15. Burnt sugar produces a fine and permanent brown color for wines. It is best to boil down common sugar or loaf sugar nearly to dryness. It is then dissolved in hot water sufficient to make the consistency of syrup; and for the purpose of neutralizing it and making it a more permanent color, add to each gal. of sugar color, about 1 oz. liquid ammonia.

16. Green color for absinthe is prepared from a solution of extract of indigo and turmeric, dissolved in spirits.

17. Violet is obtained by a solution of extract of logwood and alum.

18. Alkanet root produces a fine blue red by macerating in alcohol.

19. Barwood acquires a dark wine red color by digesting in alcohol.

20. Brazil wood, by being macerated in alcohol, or by boiling for half hour, produces a deep red.

Spurious Coloring Matter.—

The following coloring matters give, with lead acetate, the following precipitates:

Pure red wine	gives	bluish gray.
Red poppy	"	dirty gray.
Elderberry	"	dirty green.
Bilberry	"	grayish green.
Privetberry	"	green.
Dwarf elder	"	bluish gray to violet in the fresh berries and fine green in the fermented extract.
Mallow flower	"	dark green.
Logwood	"	feeble dark blue.
Brazil wood	"	wine red.

The following colors, when present, give the following precipitates with alum and ammonium carbonate:

Pure red wine	gives	dirty green.
Red poppy	"	slate gray.
Elderberry	"	bluish gray.
Bilberry	"	bright violet
Privetberry	"	bright green.
Dwarf elderberry	"	bright violet.
Mallow flower	"	bluish violet.
Logwood	"	dark violet.
Brazil wood	"	carmine red.

Cranberries can be made into wine in the same way as bilberries. In America the cranberry is largely cultivated, and forms a considerable article of commerce, a quantity of the fruit being exported. In the northern parts of Russia it is also very abundant.

Cowslip Wine.—To every gal. of water allow 3 lb. of lump sugar, the rind of 2 lemons, the juice of one, the rind and juice of 1 Seville orange, 1 gal. of cowslip pips. To every 4½ gal. of wine allow 1 bottle of brandy. Boil the sugar and water together for ½ hour, carefully removing all the scum as it rises. Pour this boiling liquor on the orange and lemon rinds, and the juice, which should be strained; when milk warm, add the cowslip pips or flowers, picked from the stalks and seeds; and to 9 gal. of wine 3 tablespoonfuls of good fresh brewers' yeast. Let it ferment three or four days, then put all together in a cask with the brandy; and let it remain for two months, when bottle it off for use. To be boiled ½ hour; to ferment three or four days; to remain in the cask two months. Make this in April or May.

Currant Wine.—Squeeze the currants through a coarse bag; have equal parts of water and juice, or ⅛ water, as taste may direct, and add 3 lb. of loaf sugar to each gal. of the mixture; mix well and bottle in stone jugs or demijohns; treat same way as blackberry wine—partially corked and keep in a cool place. Some keep a bottle of the mixture to fill up the vessels as they effervesce, but it is not always necessary. Bottle in October, when fermentation ceases; this makes a beautiful and delicious wine, and improves with age.

Red Currant Wine (with Raspberries.)—Ten gal. of red currant juice, 1 pt. of raspberry juice, 20 gal. of water, 18 lb. of finely sifted loaf sugar. Put the ingredients together and let them stand until the sugar is dissolved, then put the liquor into a cask and bung lightly for the air to aid in the fermentation. Let it cease fermenting, then bung tightly. Bottle in a year's time, using sound corks and sealing them. It will be in excellent condition in three months.

Currie **Wine.**—Currie powder, 5 oz.; white wine, 1 gal. Digest for one week and strain.

Cyprus.—Muscatel (very old), 25 liters; alcohol, 85%, 5 liters; white wine (dry and alcoholic), 64 liters; infusion of walnuts, 1 liter; white sugar, 2 kilos.; water, 1 liter. Mix the different wines together; add the alcohol and the infusion of walnuts; dissolve the sugar in the water, and boil till the solution becomes of a golden color; add it to the mixture with a little of the infusion of cloves.

2. *British Cyprus.*—From the juice of white elderberries, 1 qt., and Lisbon sugar, 4 lb., to water, 1 gal., together with ⅛ drm. each of bruised ginger and cloves. When racked add raisins and brandy, of each 2 oz.

Damson Wine.—

1. Water	12	gal.
Damsons (bruised)	8	gal.
Raw sugar	30	lb.

Ferment, then add—

Red tartar (dissolved)	6	oz.
Cloves (bruised)	¼	oz.

Let it stand until fine, then bottle.

2. Crush 20 lb. ripe damson plums; boil in 3 gal. water; press out the juice; add 6 lb. sugar; put in a barrel and let it ferment; then add after two weeks a little good brandy; bottle.

3. One gal. of boiling water to every 8 lb. of bruised fruit, 2½ lb. of sugar to each gal. of juice.

Well bruise the fruit and pour the boiling water on it; let it stand forty-eight hours. Then strain the mixture into a cask and put in the sugar. When fermentation ceases fill up the cask and bung closely. Bottle in ten months' time. It will be fit for use in a year, but improves with keeping. Time required, about two years.

Detannation of Wines.—*The Formulary* recommends the following method for removing the tannin or astringent matter from sherry wine:

Sherry	7	pt.
White of egg	1	fl. oz.
Alcohol	1	pt.

Beat the white of egg to a froth and mix it with wine; heat to about 170° F., or until the albumen is coagulated. Then cool, add the alcohol, and after standing a few hours, filter clear through paper.

This wine is a much better menstruum and preservative medium for organic substances than sherry itself.

Detartarization of Wine. See *Management of Wine.*

Elder Wine.—

Alcohol, 90%	12½	gal.
Water	12½	gal.
Elderberries (juice of)	6¼	gal.
Loaf sugar	18¾	lb.
Port wine	2¼	gal.
Orange flower water	⅝	pt.

Allow it to stand one week; draw off.

Elderberry Wine.—1. Gather the berries when quite ripe, on a dry day; pick them off the stems, and bruise them with your hands. Strain the juice; let the liquor rest in glazed earthenware pans for twelve hours to settle. Allow to every pint of juice a 1½ pt. of water, and to every gallon of the mixed water and juice 3 lb. of good moist sugar. Put it over the fire in a large saucepan, and when it is ready to boil, clarify it with the whites of four eggs. Let it boil for an hour, and, when nearly cold, put in some yeast to work it; pour it into the cask, reserving some of the liquor to fill up the cask with, as it sinks with working. If you have about 10 gal. or so, it should be fit to bottle off in two months' time after it has been closed down. Keep at least a year in bottle.

2. Gather the berries when quite ripe, and in dry weather. Pick them clean; put them into a copper with ½ gal. of water, and keep up a slow fire until the berries sink, then strain the juice through a hair sieve, and to every gallon of it allow 3 gal. of soft water, and to every gallon of the mixed liquor 3 lb. of good moist sugar. Put back into the copper, and boil for an hour, skimming thoroughly; draw off into a tube, and, when it is about 70°, put a toast spread with yeast into it, and let it work for forty-eight hours, or longer if necessary; pour it or draw it off if you have a tap in your tub as should be the case, into the cask which is to hold it, and if you have 18 gal. of liquor, add 1 oz. of cloves, 2 oz. of allspice, 2 oz. of Jamaica ginger, and 1 oz. of sweet almonds, all bruised. Bung very slightly until fermentation is quite over; then close down tightly and tap in three months.

3. Old recipe: Put the ripe picked over berries into an earthen pot; put this into a copper with sufficient water to come up about two-thirds of the height of the pot, which is about as far as the berries should reach inside; be careful that no water touches them. Make a gentle fire, and keep the pot in the water till it is quite hot; then take it out. Pour the berries into a coarse cloth, strain the juice, and put it into a large saucepan; to every quart of juice allow a pound of good moist sugar; let it boil, and skim well. It should boil until rather thick, then pour it into a jar. Put 60 lb. of raisins into a cask, and fill it up with water; let it stand for a fortnight; stir it well every day; then pour off the liquor into a clean cask that just holds it. It should stand until it has done hissing; then bung it down close, and stand until fine. To every gallon of this liquor, allow half a pint of the elder sirup; mix well, and when it has fined down, rack off into another cask; bottle off after three months.

4. Chop a quantity of Malaga raisins quite fine; allow 1 qt. of water to every lb. of raisins, and put raisins and water into an open tub; cover over with a double cloth, and let it stand for nine days, stirring up each day. Then draw off the liquor as long as it will run, and press the raisins to get out the remainder of the juice; mix all together in a barrel. To every gal. of liquor allow 1 pt. of the juice of elderberries, prepared simply by mashing the berries with the hands, and straining off the juice. Stop down close, and stand for six weeks, then draw off the fine liquor, and to every gal. add all together into a perfectly clean vessel, and boil for one hour; then pour into an earthenware pan; when cool enough to dip in the finger, put in a tablespoonful of brewers' yeast; let it work three days, then skim and put in a ½ lb. of moist sugar. Stand again until quite fine, and then bottle off. Keep in a cool cellar for use.

5. Take 30 lb. of Malaga raisins, add 8 gal. of water to them, and allow to steep for twelve days; draw off the liquor, and put it into a copper with 2 gal. of elderberry juice; boil for ten minutes, removing all scum as it rises; then add 7 lb. of moist sugar, ½ oz. of allspice, ½ oz. of cloves, and 2 oz. of Jamaica ginger, all well bruised; boil again for an hour, skimming thoroughly; draw it off and float some toast covered with yeast in it; leave it to work for two or three days, then pour into a clean cask, and, when all fermentation is over, bung down tightly. If made the end of August or in September, this wine would be ready to tap about Christmas, and should be bottled in January or March.

6. Allow 3 qt. of elderberries, which are quite ripe and carefully picked over, to every gal. of water; boil, skimming well, until the berries break, then strain the liquor, and to every gal. allow 3 lb. of moist sugar, and to every 4 gal. add 2 oz. of bruised ginger, 2 oz. of cloves, and 2 oz. allspice; boil for an hour; work with yeast when nearly cold; cask it the third day, and when all working is over, bung down.

7. To every gal. of berries allow a gal. of water; steep in a tub for four days, bruising well each day. Squeeze the pulp, and strain off the juice. To every gal. add 3 lb. of brown sugar, and spices in the same proportion as in the above recipe; tie the spice in a muslin bag; boil all the ingredients for an hour; work with yeast when nearly cold; then pour into a well cleaned cask, and bung down when the fermenting operation has quite ceased. Bottle off in two or three months. Into every bottle put a lump of white sugar and a little brandy.

8. To 1 gal. of berries add 3 qt. of water; bruise in a tub, and stand for three days. To every qt. of liquor allow 1 lb. of moist sugar, 1 oz. of ginger, and 1 oz. of cloves, both bruised (the spice should be put into muslin bags); put small cask just large enough to hold the amount. Keep out the air for three weeks, but do not bung down close until that period has elapsed. Tap in two months to test it; if fine, bottle off.

Elder flower wine is made from the flowers in this manner: 1. Gather the flowers on a dry day; remove all stalks, and to every qt. of flowers allow 1 gal. of water and 3 lb. of loaf sugar; boil the sugar and water for a quarter of an hour; then pour it on the flowers, and let it work for three days; then strain the wine carefully through a hair sieve, and put it into a cask. To every 5 gal. of wine add ½ oz. of isinglass, dissolved in cider, and 3 eggs (whites only) beaten up; close up the cask, and stand six months before bottling off.

2. Boil 18 lb. of powdered loaf sugar in 6 gal. of spring water; beat up the whites of 2 eggs, and add; skim very thoroughly, and put in a ¼ of a peck of elder flowers, picked from their stems; take off the fire, and stir until cool, then add 4 tablespoonfuls of yeast and 6 spoonfuls of lemon juice, strained and free from pips; mix well with the liquor by stirring twice daily for four days. Stone 6 lb. of Malaga raisins, and put them into a well cleaned out cask; pour the wine upon them. Stop up the cask closely, and keep it in a rather warm place. If made in July or August, bottle off in February or March. This wine, when well made, very much resembles Frontignac.

Fig Wine.—Figs are largely employed, especially in Algeria, for the production of fictitious wine. For this purpose figs from Asia Minor are preferred on account of their relative cheapness and richness in sugar. When the fruit is treated with a suitable quantity of tepid water, acidified with tartaric acid, fermentation rapidly commences, resulting in the production of a vinous liquid of about 8° alcoholic strength, and so inexpensive that it defies all competion of genuine grape wine, Algerian or otherwise. Fig wine cannot be distinguished either by taste or the ordinary methods of analysis from genuine grape wine, especially when it is mixed with a proportion of the latter. The detection of fig wine, however, is rendered comparatively easy by the fact that it contains mannitol. In order to separate the mannitol, 100 c. c. of fig wine are evaporated to a syrup, which is allowed to stand in a cool place for twenty-four hours. At the end of this time the residue will have solidified, well defined groups of crystals being formed. The crystals are washed with cold alcohol of 85% strength in order to remove impurities. The residue is mixed with animal charcoal and extracted with boiling 85% alcohol and filtered. The alcoholic solution yields on evaporation a crystalline mass of mannitol, which may be recognized by its physical and chemical properties. Certain white wines from the Gironde district, as well as raisin and some other wines, contain mannitol, but only to the extent of a few decigrammes per lit.; while fig wine contains from 6 to 8 grm. per lit. By a determination of the mannitol it is possible to detect an adulteration of normal Algerian wine with one half or even one fourth of fig wine.

To Fine Wines.—There are various modes of fining wine; eggs, isinglass, gelatine and gum arabic are all used for the purpose. Whichever of these articles is used, the process is always the same. Supposing eggs (the cheapest) to be used: Draw a gal. or so of the wine and mix 1 qt. of it with the whites of 4 eggs, by stirring it with a whisk; afterward, when thoroughly mixed, pour it back into the cask through the bunghole, and stir up the whole cask in a rotary direction with a clean split stick inserted through the bunghole. Having stirred it sufficiently, pour in the remainder of the wine drawn off, until the cask is full; then stir again, skimming off the bubbles that rise to the surface. When thoroughly mixed by stirring, close the bunghole, and leave it to stand for three or four days. This quantity of clarified wine will fine 13 doz. of port or sherry. The other clearing ingredients are applied in the same manner, the material being cut into small pieces, and dissolved in the qt. of wine, and the cask stirred in the same manner.

To Lay Down Wine. – Having carefully counted the bottles, they are stored away in their respective bins, a layer of sand or sawdust being placed under the first tier and another over it; a second tier is laid over this, protected by a lath, the head of the second being laid to the bottom of the first; over this another bed of sawdust is laid, not too thick, then another lath; and so on till the bin is filled. Wine so laid in will be ready for use according to its quality and age. Port wine, old in the wood, will be ready to drink in five or six months; but if it is a fruity wine, it will improve every year. Sherry, if of good quality, will be fit to drink as soon as the sickness (as its first condition after bottling is called) ceases, and will also improve; but the cellar must be kept at a perfectly steady temperature, neither too hot nor too cold, but about 55° or 60°, and absolutely free from draughts of cold air.

To Fine White Wine.—To fine 30 gal. white wine the whites of 3 eggs, will be required with the addition of ½ an egg shell reduced to powder, and a tablespoonful of salt. Beat up all together with a little of the wine and then pour gradually into the wine, stirring constantly.

To Fine Red Wines.—The operation is carried on in the same manner. To lighten up a wine add 6 eggs and a handful of salt, use the whites, yelks, and shells.

Flatness of Wine. See *Management of Wine,*

Ginger Wine.—1. This is an excellent stomachic, and is very popular in England as a cheap substitute for a grape wine:

Sugar	12	lb.
Water	3½	gal.
Ginger	4	oz.

Boil them together for half an hour; when cooled to 75 degrees, add the rinds of 6 lemons and some good yeast; let it ferment for ten or fourteen days, then add 1 pint of brandy and bottle if for use.

2. To 9 gal. of water allow 27 lb. of loaf sugar, 9 lemons, 12 oz. of bruised ginger, 3 tablespoonfuls of yeast, 2 lb. of raisins stoned and chopped, 1 pt. of brandy.

Boil together for one hour in a copper (let it previously be well scoured and beautifully clean) the water, sugar, lemon rinds and bruised ginger. Remove every particle of scum as it rises, and when the liquor is sufficiently boiled, put it into a large tub or pan, as it must not remain in the copper. When nearly cold, add the yeast, which must be thick and very fresh, and the next day, put all in a dry cask with the strained lemon juice and chopped raisins. Stir the wine every day for a fortnight; then add the brandy, stop the cast down by degrees, and in a few weeks it will be fit to bottle. Sufficient to make 9 gal. of wine. The best time for making this wine is either in March or September.

Gooseberry Wine, Effervescing.—To every gallon of water allow 6 lb. of green gooseberries, 3 lb. lump sugar.

This wine should be prepared from unripe gooseberries, in order to avoid the flavor which the fruit would give to the wine when in a mature state. Its briskness depends more upon the time of bottling than upon the unripe state of the fruit, for effervescing wine can be made from fruit that is ripe as well as that which is unripe. The fruit should be selected when it has nearly attained its full growth, and consequently before it shows any tendency to ripen. Any bruised or decayed berries and those that are very small should be rejected. The blossom and stalk ends should be removed, and the fruit well bruised in a tub or pan, in such quantities as to insure each berry being broken without crushing the seeds. Pour the water (which should be warm) on the fruit, squeeze and stir it with the hand until all the pulp is removed from the skin and seeds, and cover the whole closely for twenty-four hours; after which strain it through a coarse bag, and press it with as much force as can be conveniently applied, to extract the whole of the juice and liquor the fruit may contain. To every 40 or 50 lb. of fruit 1 gal. more of hot water may be passed through the marc, or husks, in order to obtain any soluble matter that may remain, and be again pressed. The juice should be put in a tub or pan of sufficient size to contain all of it, and the sugar added to it. Let it be well stirred until the sugar is dissolved; and place the pan in a warm situation; keep it closely covered, and let it ferment for a day or two. It must then be drawn off into clean casks, placed a little on one side for the scum that rises to be thrown out, and the casks kept filled with the remaining must that should be reserved for that purpose. When the active fermentation has ceased, the casks should be plugged upright, again filled, if necessary, the bungs be put in loosely, and after a few days, when the fermentation is a little more languid (which may be known by the hissing noise ceasing), the bungs should be driven in tight, and a spile hole made, to give vent if necessary. About November or December, on a clear, fine day, the wine should be racked from its lees into clean casks, which may be rinsed with brandy. After a month, it should be examined to see if it is sufficiently clear for bottling; if not, it must be fined with isinglass, which may be dissolved in some of the wine; 1 oz. will be sufficient for 9 gal. In March or April, or when the gooseberry bushes begin to blossom, the wine must be bottled, in order to insure its being effervescing. Make this the end of May or the beginning of June, before the berries ripen.

Grape Wine.—1. Ripe grapes.—Mash sound, ripe grapes well with your hands in an earthen pan, or if not with your hands, with a perfectly tasteless stick of wood. Do not crush the seeds; strain the liquor into a cask, gently squeeze the pulp, pouring the remainder of the juice into the cask (strained). Let it stand aside for a fortnight, then draw it off into another cask, covering up the bunghole with a piece of slate till all fermentation has ceased. Bottle in six months, cork and seal, and it will be drinkable in twelve months' time.

2. Grape Wine.—Ten lb. fresh grapes are put into a large jar or crock, 3 qt. boiling water poured over them, and when the water is cool enough to permit of it, squeeze the grapes well with the hand. After allowing the jar to remain 3 or 4 days covered with a cloth, press out the grapes, then add 5 lb. sugar. Allow it to remain for one week, skim and strain carefully, then bottle, corking loosely. After the fermentation is completed, strain and seal tightly.

3. Put 20 lb. of ripe grapes into a stone jar and pour on 6 qt. boiling water; when cooled sufficiently squeeze by hand. Cover jar with cloth, let stand for three days, then press out the juice; add 10 lb. crushed sugar. After standing a week, scum, strain and bottle, corking loosely. When fermentation is complete strain again and bottle, corking tightly. Lay on side in cool place.

British Hock, British Red Hock.—From cream of tartar, 1¼ oz.; tartaric acid, ½ oz. (both in very fine powder); juices of the purple plum, ripe apples, and red beet, of each (warmed), 5 pt.; lemon juice, 1 pt.; with white sugar, 2½ lb. per gal.

Honey Wine.—

Honey	20	lb.
Cider	12	gal.

Ferment, then add—

Rum	½	gal.
Brandy	½	gal.
Red or white tartar (dissolved)	6	oz.
Bitter almonds	¼	oz.
Cloves	¼	oz.

This is also called mead wine.

Kola Wine.—

Kola nuts in coarse powder	1	oz.
Sherry wine	30	oz.

Macerate for eight days and filter.

This wine may also be made with roasted kola nuts, which give a better tasting preparation and it is none the worse for the addition of a little sugar.—*Dieterich in Phar. Central.*

Madeira Wine.—1. To 10 gal. prepared cider add 1 gal. Madeira wine; 3 qt. pure proof spirits; 1 qt. brandy; ¾ to 1 oz. tartaric acid; ¼ drm. oil bitter almonds cut in ½ pt. alcohol; 1½ lb. loaf sugar. Allow it to stand for two weeks; rack, fine and repeat if necessary.

2. Pale malt, ground, 4 bushels; boiling water, 44 gal.; infuse, strain off this while warm; take 24 gal and add sugar candy, 14 lb., and cream of tartar, 3 oz.; when dissolved add yeast 2 lb.; ferment, keep skimming off the yeast and when the fermentation is nearly finished add raisin wine, 2½ gal.; brandy and sherry wine of each 2 gal.; rum, 1 qt.; bung it down for six or nine months. A second infusion of the malt may be made for beer.

8. Purified honey	15	oz.
Hop tops	¾	oz.
Alcohol, 90%	19½	oz.
French wine	4½	qt.

Add ¾ oz. tincture burned sugar. Filter.

Mead or Honey Wine.—Take 10 gal. of water, 2 gal. of strained honey, with 2 or 3 oz. of white Jamaica ginger root, bruised, and 2 lemons cut in slices. Mix all together and boil for half an hour, carefully skimming all the time. Five minutes after the boiling commences add 2 oz. of hops. When partially cold put it into a cask to work off. In about three weeks after working it will be fit to bottle. This is a wholesome and pleasant beverage, particularly grateful in summer when drunk mixed with water.

British Malmsey.—From sliced or grated parsnips, 4 lbs.; boiling water, 1 gal.; when cold press out the liquid, and to each gal. add of cream of tartar, ½ oz., and good Muscovado sugar, 3 lb.; ferment, rack and add of brandy 3% to 5%. Good Malaga raisins may be substituted for the sugar.

Maturation of Wine. See *Management of Wine.*

Medicated Wines.—Dieterich, in a late issue of his *Pharmaceutische Manual*, gives a number of formulæ for the preparation of medicated wines. Few, if any, of these can be regarded as tipples, but all are peculiar for the fact that the wine from which they are made is detannated. We give a selection of the more important formulæ for articles which should be salable if put up in attractive form and brought before customers in a nice way.

Cascara Sagrada Wine.—

White gelatine, in strips	15	grn.
Distilled water	2½	drm.

Dissolve by the aid of heat, and add to—

Sherry wine	28	oz.

Shake well, set aside for some time, then add—

Tasteless fluid extract of cascara sagrada	1½	oz.
Sugar	1½	oz.

Set aside in a cool place for eight days, and filter.

A similar wine, not free from the bitter principle of the bark, may be made by macerating 1½ oz. of cascara sagrada and 1½ oz. of sugar in 30 oz. of sherry, for eight days, and filtering. A *Rhamnus frangula* wine can be made in the same way.

Cinchona Wine.—

White gelatine	15	grn.
Distilled water	2½	drm.
Sherry wine	18	oz.

Detannate in the manner directed above, then add—

Simple syrup	6	oz.
Tincture of cinchona	6	oz.

After eight days, filter.

May also be made with red wine, or direct from the bark, the quantities being—

Gelatine	15	grn.
Distilled water	2½	drm.
Sherry wine	30	oz.
Cinchona bark, in coarse powder	10	drm.
Sugar	1½	oz.

Macerate for eight days, and filter.

In this case, care must be taken to have the gelatine and wine reaction complete before adding the cinchona; otherwise the alkaloid may be thrown out by the tannin of the wine.

Improved Quinine Wine.—

Gelatine	15	grn.
Distilled water	2½	drm.

Dissolve, and add to—

Sherry wine	29½	oz.

Shake, and set aside to clear; then add the following solution:

Hydrochlorate of quinine	30	grn.
Dilute hydrochloric acid	30	drops.
Water	½	oz.

After a week filter.

This is double the strength given by Dieterich.

To Mellow Wines.—Cover the orifices of the vessel containing it with bladder closely fastened, instead of the usual materials, and an aqueous exhalation will pass through the bladder, leaving some fine crystallizations on the surface of the wine, which, when skimmed off, leaves the wine in a highly improved state of flavor. Remnants of wine covered in this manner, whether in bottles or in casks, will not turn mouldy as when stopped in the usual way, but will be improved instead of being deteriorated.

British Red Moselle.—Malmsey, colored with clarified elderberry juice.

British Sparkling Moselle.—From rich cider apples (carefully peeled and garbled), pressed with one-fourth of their weight of white magnum bonum plums (previously stoned), and the juice fermented with 2½ lb. double refined sugar per gal., as champagne.

Mould. See *Management of Wine*, on page 615.

Mulberry.—1. Juice of the fruit, 10 gal.; or of mulberries, bruised, 15 gal.; water, 15 gal.; sugar, 85 gal. Boil and ferment, then add spirit, 2 or 8 gal.; red tartar, 7 oz.; cassia, ½ oz.; bitter almonds, ½ oz.

2. Ripe mulberries, ripe apples, equal quantities; sugar or honey, 1 lb. to the gal. Express the juice, put it into a cask, and add the sugar. Ferment with yeast, 1 qt. to every hhd.; catechu, ½ lb.; red argol, ½ lb.

Mulled Wine.—Take ¼ oz. bruised cinnamon, ½ nutmeg, grated, and 10 bruised cloves. Infuse them in ½ pt. boiling water for an hour, strain, and add ½ oz. white sugar. Pour the whole into 1 pt. hot port or sherry wine. This is a good cordial and restorative in low stages of fever, or in the debility of convalescence from fevers.

British Muscatel.—As British sparkling moselle, with some infusion of clary, or of the musk plant, to flavor it.

Orange Wine.—The oranges must be perfectly ripe. Peel them and cut them in halves, crosswise of the cells; squeeze into a tub. The press used must be so close that the seeds cannot pass into the must. Add 2 lb. white sugar to each gal. sour orange juice, or 1 lb. to each gal. sweet orange juice, and 1 qt. water to each gal. of the mixed sugar and juice. Close fermentation is necessary. The resultant wine is amber colored, and tastes like dry hock, with the orange aroma. Vinegar can be made from the refuse, and extract from the peels.

Peach, to Make.—Take of cold soft water, 18 gal.; refined sugar, 25 lb.; honey, 6 lb.; white tartar, in fine powder, 2 oz.; peaches, 60 or 80 in number. Ferment, then add 2 gal brandy. This will make 18 gal.

The first division is to be put into the vat, and the day after, before the peaches are put in, take the stones from them, break them and the kernels, then put them and the pulp into the vat.

Pepsin Wine.—

White gelatine, in strips	15	grns.
Distilled water	2½	drm.
White wine	25	oz.

Detannate as described. At the same time mix together—

Pepsin	7	drm.
Glycerine	6	drm.
Distilled water	6	drm.

Add to the wine along with 40 min. of hydrochloric acid; macerate for eight days, shaking occasionally; then filter.

Port.—

1. Ripe fruit	4	lb.
Clear soft water	1	gal.
Sugar	3	lb.
Cream tartar dissolved in boiling water	1½	oz.
Brandy	2 to 3%	

Flavoring as required.

The addition of an equal quantity of fruit and sugar increases the strength.

2. Add to 10 gal. prepared cider, 2 gal. genuine port wine; 2 qt. best cognac brandy; 1 pt. simple syrup; 1 lb. bruised raisins; 1 oz. tincture kino; ½ oz. extract rhatany; 3 qt. proof spirits. Allow it to stand for two weeks, rack, fine and repeat if necessary. Keep the wine cool.

3. British Port, London Port, Southampton Port.—

Red Cape	2	gal.
Damson or elder wine	1	gal.
Brandy	½	pt.
Powdered kino	½	oz.
4. Strong old cider	6	gal.
Elderberry juice	4	gal.
Sloe juice	3	gal.
Sugar	28	lb.
Powdered extract of rhatany	1	lb.
At time of racking add brandy	½	gal.
Good port wine	2	gal.

5. Good port, 12 gal.; rectified alcohol, 6 gal.; French brandy, 3 gal.; strong rough cider, 42 gal.; mix in a well sulphured cask.

6. Port wine, 8 gal.; brandy, 6 gal.; sloe juice, 4 gal.; strong rough cider, 45 gal.; as the last.

7. Cider, 24 gal.; juice of elderberries, 6 gal.; sloe juice, 4 gal.; rectified alcohol, 3 gal.; brandy, 1½ gal.; powdered rhatany, 7 lb.; isinglass, 4 oz.; dissolved in a gallon of cider; bung it down; in three months it will be fit to bottle, but should not be drunk until the next year; if a rougher quality is required, the quantity of rhatany may be increased, or alum, 5 or 6 oz. (dissolved in water), may be added.

Quinine Wine.—Break into small pieces 1 oz. of sulphate of quinine, and put it in a glass jar with 2 oz. of 90% Alcohol; let the quinine infuse for twenty-four hours; add 1 qt. of claret, and let it remain thus for twelve days; then filter the wine through a felt bag, and bottle for use. The above quantity of quinine may be dissolved, without the addition of alcohol in any of the following wines: Medeira, Marsala, Malaga, Lunel, or Alicant.

Racking Wine. See *Management of Wine.*

Red Wine.—

Cider	16	gal.
Honey	27	lb.
Tartar (red)	8	oz.
Raw sugar	3	lb.
Sliced red beet	6	lb.

Boil, ferment, add—

Cassia	½	oz.
Ginger	½	oz.
Spirit	5	qts.

Ripening of Wine. See *Mananagement of Wine.*

Ropiness of Wine. See *Management of Wine.*

Senna Wine.—

Alexandrian senna leaves	1½	oz.
Sherry wine	27	oz.

Macerate for eight days, press and strain; then add 5 grns. of gelatine dissolved in 2½ drm. of distilled water, and then the following:

Tincture of orange peel	1	oz.
Tincture of ginger	½	oz.
Aromatic tincture	80	min.
Honey	2	oz.

Again allow to stand for ten days, and filter. This wine is an excellent aperient for persons suffering from hemorrhoids. It should be taken in tablespoonfuls, according to the effect desired.

Sherry Wine.—1. To 8 gal. prepared cider add 6 qt. best sherry wine; 1 gal. native wine; ¼ drm. oil bitter almonds cut in ½ pt. alcohol; 3 gal. proof spirits; 1 lb. sugar; saffron to color. Let the wine stand for ten days, rack and fine.

2. Cape or raisin wine slightly flavored with a very little bitter almond cake, or, what is more convenient, a little of the essential oil dissolved in alcohol (essence of bitter almonds). —3. To the last add a minute quantity of sweet brier, eau de fleurs d'oranges, or orris, to give it a very slight bouquet.—4. To each gal. of strong raisin must, add, when racking, 1 Seville orange and 2 bitter almonds, both sliced. By omitting the almonds, and adding 2 or 3 green citrons to each 10 gal., this forms British Madeira:

5. Loaf sugar	32	lb.
Sugar candy	10	lb.
Water	16	gal.

Boil, add pale ale wort (as for Madeira), 6 gal.; yeast, 1 lb.; on the third day add raisins, stoned, 10 lb.; and in another two or three days brandy 1 gal.; bitter almonds, grated, 1 dr.; bung it down for four months, draw it off into another cask, add brandy 1 gal., and in three months bottle it.—6. Teneriffe, slightly flavored with cherry laurel or almonds, forms a most excellent British sherry, either alone or diluted with an equal quantity of Cape or raisin wine.

Sour Grapes, Sherry Wine from.—The way an imitation sherry is made in England is to mix equal quantities of new cider and honey, and evaporate to a density so that a fresh egg will float so as to be half immersed. The liquid is then cooled and kept in a stone vessel at a temperature of from 60° to 67° Fah., until in about twelve or fourteen days the peculiar smell of the fermentation is strongly established; then the liquid is put into a barrel, closed up, and placed in a cool cellar to settle; after three or four days it will be cleared; it is then bottled, and six weeks later is fit for drinking. We believe that grape juice may be used in place of cider; but if too acid, sugar and water would only make a kind of lemonade, and spoil the sherry taste, which is not acid. Sugar does not destroy this, but sulphite of lime is the proper material (not sulphate).

Sourness in Wine, to Correct a Bad Taste and Sourness.—Put in a bag the root of wild horseradish cut in bits. Let it down in the wine and leave it there two days; take this out and put in another, repeating the same till the wine is perfectly restored. Or fill a bag with wheat; it will have the same effect.

Sour Wine, to Restore.—1. Take calcined gypsum, in powder, 1 oz.; cream of tartar, in powder, 2 oz.

Mix them in a pint or more of brandy; pour it into the cask; put in, also, a few sticks of cinnamon, and then stir the wine without disturbing the lees. Bung up the cask next day.

2. Boil 1 gal. of wine with some beaten oyster shells and crab's claws, burnt into powder, an ounce of each to every 10 gal. of wine; then strain out the liquor through a sieve, and when cold, put it into wine of the same sort, and it will give it a pleasant, lively taste. A lump of unslaked lime put into each cask will also keep the wine from turning sour.

Strawberry Wine.—Take of cold, soft water, 7 gal.; cidar, 6 gal.; strawberries, 6 gal. Ferment. Mix raw sugar, 16 lb.; red tartar, in fine powder, 3 oz.; the peel and juice of 2 lemons; then add brandy, 2 or 3 qt. This will make 18 gal.

Another.—Take of cold, soft water, 10 gal.; strawberries, 9 gal. Ferment. Mix raw sugar, 25 lb.; red tartar, in fine powder, 3 oz.; 2 lemons and 2 oranges, peel and juice; then add brandy, 1 gal. This will make 18 gal.

To Sweeten Wine.—In 30 gal. of wine infuse a handful of the flowers of clary; then add 1 lb. of mustard seed, dry ground, put it into a bag, and sink it to the bottom of the cask.

Tartaric Acid in Wine, Detection of Free.—Professor Claus evaporates to a syrup and agitates with ether. If free tartaric acid is present, the ether leaves, on evaporation, a crystalline deposit, which, if dissolved in water, gives, on the addition of an alcoholic solution of potassic acetate, a precipitate of tartar. The author proves the solubility of tartaric acid in ether, which is denied in most text books.—*Polyt. Notizblatt.*

British Tokay.—To good cider, 18 gal., add of elderberry juice, ½ gal.; honey, 28 lb.; sugar, 14 lb.; red argol, in powder, ¾ lb.; crystallized tartaric acid, 3 oz.; mix, boil, ferment, and, when the active fermentation is complete, add of brandy, 1 gal., and suspend in the liquid from the bunghole a mixture of cassia and ginger of each, ½ oz.; cloves and capsicum of each, ¼ oz.; the whole bruised and loosely inclosed in a coarse muslin bag. It will be ripe in 12 months.

White Wine.—

Cider	100	gal.
Honey	80	lb.
Sugar	20	lb.

Mix and ferment. Add 6 gal. spirit; white tartar, 1½ lb.; bitter almonds bruised, 1 oz.

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SAXE'S GUIDE,

OR

HINTS TO SODA WATER DISPENSERS.

COMPLETE AND MODERN

FORMULÆ

FOR THE MANUFACTURE AND DISPENSING OF ALL CARBONATED DRINKS,
CONTAINING FULL AND EXPLICIT DIRECTIONS FOR MAKING
ALL THE LEADING POPULAR DRINKS OF THE AGE,
AND GIVING MY

Private Formulæ for Fancy Syrups and Fancy Mixed Drinks,

CONTAINING VALUABLE INFORMATION ON ALL SUBJECTS CONNECTED
WITH THE SODA BUSINESS, WHICH WAS OBTAINED BY ACTUAL
EXPERIMENT AND LONG STUDY, COVERING A PERIOD OF
FIFTEEN YEARS, TWO OR THREE OF THE FOR-
MULÆ CONTAINED IN THIS WORK ALONE
BEING WORTH TO THE DISPENSER
DOUBLE THE COST OF
THE BOOK.

BY

D. W. SAXE, DRUGGIST.

1890.

(Index on Page 175)

INTRODUCTORY.

In compiling this little book of formulæ it has been my aim to give in as concise form as possible, practical working receipts for making (in my judgment, after fifteen years experience and close study in the manufacture and sale of carbonated drinks) fancy and plain syrups for soda fountain use, fancy mixed drinks, mineral waters, and many other receipts connected with the soda business, which will be of interest to the dispenser. A few of the formulæ found in this book have been kindly donated from time to time by eminently successful dispensers of the "cooling draught," but the greater part of them are of my own creation, based on careful and long study, and practical experiments, to produce at as low a cost as possible the best results.

I have tried as far as possible to overcome the obstacles usually found in the ordinary formulæ for making syrups, where the author is apt to have lost sight either of the cost of the finished syrup or the unnecessary time and trouble required in manipulating same.

The best proof I can offer of the superior quality of the syrups made from the enclosed formulæ, is that they are in use now at my own fountain, and that customers will walk four or five blocks out of their way and past other fountains to get a drink of my soda.

On the following pages I give a short sketch of my experience in the manufacture and sale of carbonated drinks covering a period of fifteen years, giving information in regard to charging fountains, how to make the best carbonated waters, and showing the saving in cost to the dispenser. I do this simply to show parties who have fountains and who are skeptical in regard to the profit derived in the sale of carbonated drinks, that if properly attended to and carefully managed, they can make their soda business a feature of no small importance and besides draw other trade, which they probably never would get without the aid of the soda fountain.

If this little "work" should fall into the hands of some druggists and dispensers of soda water (as I have no doubt it will) who have had a similar experience, and are familiar with the facts contained in the following pages of "My Experience," I trust they will pass on without comment to the formulæ, and it may be possible that they will find at least a few which are new to them, and which, if given a fair trial, will prove of some benefit. At any rate the book can do them no harm, and as it is published more for the benefit of the dispenser who has never had a chance to thoroughly study the inside workings of the soda business, I shall be content if it reaches the latter class and is of any benefit to them.

With best wishes to all dispensers who may have the fortune, or misfortune, to read my book, I am,

Very truly yours,

D. W. SAXE,
The Author.

THE AUTHOR'S EXPERIENCE.

In the fall of '79 I purchased the bankrupt stock of drugs in the old "Snowden Drug Store," corner of Thirteenth and Farnam streets, Omaha, Neb. I paid for the same fifty cents on the dollar, which was all, if not more than it was worth, as the stock had been invoiced high, and on account of the store having been closed for about three months, previous to my purchase, I could not, of course, depend on much of my predecessor's old trade. After paying for the stock and taking possession of the store, I found that I had very little cash left, and being almost a stranger in Omaha and quite young (barely twenty-one) for such an undertaking, I found it rather difficult to establish my credit on the start. That fall and the following winter were "hard times" for me, and in the spring, although I had tried every way imaginable to keep expenses as low as possible, I found I was slowly running behind hand, and unless I made some lucky move soon, I could not hold out long.

I had spent about five years in the drug business in the East, previous to my coming to Omaha, and had always taken great pride and interest in making the best soda water in the town where I was located, and while there had always enjoyed the cream of the trade in that line.

At the time I started in business in Omaha the population of the city was estimated at 21,000. I found on investigation that the druggists generally up to that time had paid very little attention to the sale of soda water and, in consequence, sold very little. even in the hottest weather. I found one exception to the rule, however, and that was in the person of John W. Bell, the genial and courteous druggist on Tenth street, near the U. P. Depot. He seemed to realize the fact that it paid to make good soda, and to give that part of his business as much of his personal time and attention as he could spare from his other duties. In consequence he had a very nice soda trade and without doubt made by far the finest carbonated drinks in the city.

After thinking the matter over for some time, I came to the conclusion, that if my friend Bell, located as he was at that time, away several blocks from the business part of the city, could capture all, or nearly all, of the soda trade of the city, by simply making better drinks than any one else in the business, I would see what I could do in a much better location. Accordingly on the 21st of April, 1880, I opened up the little fountain in my store, which I had purchased with other "traps" in the Snowden bankrupt stock. The apparatus was a small one with one draught tube, two minerals, and eight syrup cans, holding one-half gallon each, capacity for cooling about fifty pounds of ice, apparatus, I believe, cost originally $300.00.

I took particular pains my first season to serve good soda, and gave the business my personal attention as I have always done, when not otherwise engaged, and although that summer was rather cool, and on account of it being my first season in the business it took some time to establish a reputation. Still I sold between the months of April and October $1,094.80 worth of soda, which was about $700.00 more than had ever been sold in the store by my predecessor. I kept a separate book for my soda sales, and expense of running fountain, and the expense for that season including soda, boy, ice, syrups, cream, breakage and all other expense of running fountain amounted to $545.12, leaving me a net profit of $549.68, a little over 100 per cent. profit.

This encouraged me, and I determined to make a still greater effort the next season and see if I couldn't double my sales. I opened my fountain the following season, 1881, April 26th, and closed October 11th. It turned out to be an exceedingly warm summer, and with a little advertising in the way of an illuminated sign in my window and one outside in front of the store, and a thousand or so quarter sheet posters stuck up on the bill boards around town, I succeeded in surpassing my most sanguine expectation, selling that season $2,786.05; expense of selling same $1,325.10, leaving a net profit of $1,460.95. We had no water works in Omaha at that time, and all the water used for rinsing tumblers and cleaning fountain had to be carried two blocks in pails. So when we stop to consider the amount of labor required under the circumstances, with a very small fountain and limited room for working, selling soda, as we were, at 5 cents a glass, nearly $2,800 in one season at that time was a big soda business.

In the fall of 1881 I rented the corner store under Boyd's Opera House, Fifteenth and Farnam, two blocks west of my old location, and, as I was fitting up the new store in nice shape, I decided to buy a new fountain and made arrangements for more room and better facilities for my fast increasing soda business. In the spring I put in one of Tuft's counter apparatus called "The Magnolia," and, as I had plenty of room for manufacturing the carbonate waters, I decided to also buy a generator. Up to this time I had always had my fountains charged at the bottling works, paying 12½ cents per gallon for charging same. After studying up the matter thoroughly, I made up my mind I could save from 25 to 50 per cent. by charging my own fountains. So I purchased with my new apparatus a No. 3 "*Tuft's*" *Improved Sterling Generator*, and began doing my own generating. That season was a bad one, being cold and rainy most of the time during the best three months of the season, May, June and July, consequently my soda trade suffered and the sales for that season were less than the year before, amounting only to $2,626.00, but the expense was much less (on account of our charging our own founts) being only $1,063 91, which left a clean profit of $1,562.09. Showing that while the sales were short nearly $200.00 from the year previous yet the profit was over $100.00 more.

NO. 2.

It pays to charge your own founts, especially if you are doing business in a town where there is no bottling works and are obliged to ship your founts by freight to some larger town to have them charged. The freight on founts alone costing you as much as the soda.

NO. 3.

Tuft's No. 3 Sterling Generator I have used for the past nine years. I have no special motive in speaking of it as I do now, except this: Two years since when I purchased my last new apparatus (of which the plate on first page of this book is an exact copy) I thought on account of the fast increasing business in the soda line I would need a larger and more modern generator, with double the capacity of my old one. Accordingly I purchased a much larger one of a different make and style, with capacity for about 50 pounds soda bi-carb, and sulphuric acid 4 gallons. It had two purifying cylinders holding 2 gallons each, and was supposed to be one of the best generators in the market. I gave the machine a thorough trial, but after a little found it would do only about half the work with twice the amount of material that the "Little Sterling" had always done for me. For instance, in charging from 60 to 70 gallons water with the Sterling I used one gallon sulphuric acid, 22 pounds "Natrona" bi-carb soda and ½ gallon filtered water in purifying cylinder charging founts to a pressure of 150 to 160 pounds, shaking down thoroughly each time, after letting over the gas. With the new generator I used 50 pounds bi-carb soda, 4 gallons sulphuric acid and 4 gallons filtered water in purifier, and then when it did the best I could only charge 40 gallons of water at a pressure of 150 to 160 pounds.

NO. 4.

It not only cost me more than twice as much for material with the new generator, but it required twice as long to do the work. I soon decided to go back to "my first love" and wrote the manufacturers to that effect, asking them to take the new machine off my hands. They replied that I did not understand how to work it, and that they would send an expert to teach me how, which they did. When the new man arrived, I told him we would make a trial of both the generators and that if I failed to charge double the amount of soda, with half the material and in half the time, with the old generator, that it took him to charge with the new one, I would make him a present of the best box of cigars I had in the store. We made the trial and the next day he shipped the new generator back to the factory, and left town without the cigars. I have since found that the No. 3 Sterling will do all the work necessary for my large trade, and though for the past two years I have sold over $15,000.00 of soda each year, still I do not need a new generator. These are my reasons for speaking in such high terms of the "Sterling." It has been my friend for years, and I believe in standing by old friends. The original cost of my old generator was $175.00, while the new one cost $350.00.

NO. 5.

I have given the exact figures in regard to my soda trade, from year to year, simply to show to what extent the soda business can be worked up to if the dispenser will only give it the time and attention he does his other business. Competition is becoming so close in the drug business, and prices are being cut so on all patents, and on sundries, that the druggist stands little or no show of making any money without some specialty. So why not make a specialty of soda water, as it is in our line and nearly every body has invested in a soda fountain from one-eighth to one-fourth of his entire capital.

On the following pages you will find a few instructions in regard to running a generator and how to make your carbonated waters clear and sparkling, giving cost of same as compared with that purchased from the bottling works. After that comes my formulæ for making syrups and fancy drinks, comprising a list of about 140, some of which are my choicest formulas, and for which I have been offered from $25 to $50. I give them all in this work, and trust that whoever tries them may meet with as good success as I have done.

Asking the reader's pardon for having made my "Experience" so long, I will close.

The Author.

NO. 6.

How to Make the Best Carbonated Water at the Lowest Possible Cost.

Each manufacturer of generators furnishes a book giving full directions in regard to charging fountains, and explaining how carbonic acid gas is obtained by the action of the acids on either marble dust or soda, thus liberating the carbonic acid in a gaseous form.

NO. 7.

Tuft's formulæ for charging 30 gallons water at a pressure of 150 pounds with the No. 3 Sterling Generator is:

Bi-Carbonate Soda	17 lbs.	
Oil Vitriol	3 qts.	
Water in Alkali Chamber	2½ "	
Water in Purifier	2 "	
Cost, not including labor		$1 02

NO. 8.

I have found by actual experiment that I can do better. By using a little more material I can charge 60 to 65 gallons of water at the same pressure.

My formulæ for 60 gallons is:

Bi-Carbonate Soda "*Natrona*"	22 lbs.	
Oil Vitriol	3½ qts.	
Water in Purifier	2 "	
Water in Alkali Chamber	3 "	
Cost, not including labor		$1 30

NO. 9.

Always use "Natrona" soda if you can get it, as it is the most reliable and will accomplish double the amount of work of any other brand. I know this to be so.

The cost of 60 gallons carbonated water, in buying it of the manufacturers at 10 cents a gallon, would be $6.

In making your own you will save about 400 per cent., including labor.

NO. 10.

In charging founts great care should be exercised in using pure filtered water free from all organic matter and as cold as possible.

In filling my founts with water I have a large tin funnel holding about one and one-half gallons with a piece of wire strainer soldered across the inside about three inches from the bottom, supported by heavy iron wire also soldered across just under the strainer and also above. I then fill the funnel nearly full of cracked ice, through which I pour my filtered water. What are called 14 gallon fountains hold about 13 gallons and the smaller ones in proportion, room being left for agitating the carbonated water. To draw a nice glass of soda, providing the syrups are good, it is very essential that the fountains should be well shaken while being charged. When your gauge shows that you have about 180 pounds pressure on, let the gas over into the fountain slowly, agitating the same all the time by means of a wooden rocker. The first time when all the gas has gone from generator to fountain that can, your gauge will show that you have probably about 75 pounds pressure in the fountain; turn off the gas valve on top of purifier, let down more acid in the alkali chamber and run up the pressure again to 180 pounds, shaking fountain thoroughly all the time. You will find if fount is thoroughly shaken, that when you let over the gas a second time, after all has gone over that can, you still have only about 75 to 80 pounds pressure, showing that a large per cent. of the gas has been absorbed by the water. Repeat the operation several times until gauge shows a second time a pressure of 150 pounds, then detach fountain from generator, and continue as before with the second fount. After founts are charged keep them in cellar if possible, or in some cool place. When through charging always clean your generator at once and leave both the acid and alkali chambers about half full of water until you are ready to charge again.

NO. 11.

Keep your Apparatus Clean and Attractive.

Nothing adds more to the reputation of the dispenser than the fact that his fountain is always kept neat and clean, with a clean dispensing counter, clean glasses, and a clean boy in attendance.

If your business will warrant you keeping a boy, or man, in attendance all the time at the fountain, by all means have him wear a clean white coat and apron, and require him to keep his hands clean. Ladies will notice and appreciate all these little things and it will advertise your business.

NO. 12.

How to Draw a Glass of Soda.

Never allow a green hand to draw a glass of soda for a lady, let him practice first on himself and then on the small boy customer. Almost as much depends on the way a glass of soda is drawn as on the syrups and carbonated water. Always give your customers a good solid glass of soda, with a liberal allowance of cream, topping off the glass with a fine creamy foam. Never ask a customer if they will have cream, for half of them don't know whether or not they want it. Give them cream anyway, unless they request you not to, for as a rule it adds 50 per cent. to the quality of the drink. Even at 5 cents a glass you can well afford to give good cream and draw a solid drink. I am speaking of the old reliable flavors, of course.

NO. 13.

Still Drinks.

In drawing what are called "Still Drinks" we never use cream. As a rule give ladies and children more syrup than you do the men.

NO. 14.

Still Drinks.

These drinks are made by drawing an ordinary eight ounce mineral glass seven-eighths full of plain soda and then adding the syrup, and generally a little acid phosphate, stirring with a spoon.

NO. 15.

Alcohol in Soda.

If you have two draught tubes and separate coolers for same so you can have two fountains attached all the time, add to each 14 gallon fountain of soda you intend to use for your "foam" drinks, 2 ounces of alcohol or 2 teaspoonfulls of bi-carbonate of soda, (I prefer the alcohol) but for your still drinks use the plain carbonated water.

NO. 16.

To Draw a Solid Drink.

In drawing a glass of soda, when you put in the syrup first, you will find you can draw a good solid glass full much quicker by using the fountain that contains the alcohol. While for still drinks it is just the reverse.

NO. 17.

Look Out for Your Cream Can.

Scald out your cream can every time before putting in fresh cream and occasionally use a little sal-soda in your hot water. *Never* mix new cream with the old, and *never* substitute condensed milk for the cream, unless you want your soda trade to die an unnatural death.

Some of the manufacturers of soda water apparatus recommend the use of "condensed milk" where pure cream is scarce or high, but I would sooner pay $2.00 per gallon for the genuine, or else use none at all, rather than substitute so inferior an article.

NO. 18.

How to Avoid the Delay of Changing Fountains in a Rush.

If your apparatus is small and you have only one draught tube for soda, purchase of any manufacturer of soda supplies what is called a "two (2) way cock" (cost about $2.00), attach same under the counter to soda pipe leading to cooler in the fount, and screw the plate which is attached to way cock tightly to side of counter. At the bottom it has two connections for soda pipes, which are attached to same and then to two fountains of soda. It has a lever or switch which can be turned either to the right or left; so when one fount of soda runs out, which generally happens in a rush, all you have to do is to turn the switch and in less time than one minute you can draw from the second fount. After the rush is over and you have time, you can detach the empty and replace a full fount.

NO. 19.

About Using Shaved Ice in Soda.

Many dispensers think it the correct thing to use shaved ice in soda, and accordingly go to the expense of buying a machine for that purpose, making the soda boy nearly grind his arm off in the desperate attempt to shave enough ice to keep up with the trade. This is entirely unnecessary and in fact is a detriment, as it detracts from, rather than adding to the quality of the drink. It takes the life all out of the soda, leaving it flat and tasteless. I used an ice shave one or two seasons when they were in style; paid, I think, $100.00 for it and afterwards sold it for $15.00.

If you are buying a new apparatus, pay particular attention to the coolers, and see that they are of the latest and most approved style.

NO. 20.

How to Keep Soda Cold.

In putting ice on the coolers crush it very fine for the first and second layers, and after that fill up with pieces about the size of a hen's egg or a little larger, covering same with a piece of heavy cloth or bagging, which will help to keep the ice from melting.

If the ice is packed closely around your pipes and coils, and the cooler is kept full all day, you ought not to have any complaints about your soda not being cold enough. Occasionally you will find a man who will complain and say your soda is warm, but ten chances to one he would complain if you put in shaved ice, and complain of its being too cold.

NO. 21.

Of course if your apparatus is quite small the cooling capacity must be limited, and in case you happen have an unusual rush or your trade is very large anyway, you may not be able to keep your soda as cool as it should be. In that case the only remedy I can suggest would be to buy a new apparatus to meet the demands of your trade. This is the rule I have always followed. As my trade increases from year to year and I find my fountain too small to do the work required of it, I sell the old one and purchase a new one with greater capacity to meet the wants of my trade. Eight years ago when I purchased my second apparatus I thought it was large enough to accommodate my trade for at least the next ten years, but two years since I was obliged to throw it out and buy the third one. My new apparatus was made expressly for me, and was built according to my own ideas, to dispatch the greatest amount of work in the shortest possible time. It was manufactured by *A. D. Puffer & Sons, of Boston*, and is one of the most practical fountains ever made. Capacity for ice about 700 pounds. Capacity for syrups 60 gallons, with four draught tubes for soda, and four for minerals. When properly filled and packed with ice, with four boys drawing soda at one time, the temperature of the soda is from 34 to 36 degrees above zero, and remains unchanged, even during our greatest rushes in the hottest weather. As 32 degrees is the freezing point, soda drawn at from 34 to 36 is cold enough for any one, and we never have any complaint.

NO. 22.

Running Water at the Fount.

If you are doing business in a town where there are water works and good sewerage, put in a small sink under your dispensing counter about 12 inches deep with overflow about 8 inches from bottom, and water faucet just over sink, as low as possible, so when turned on the water will not spatter; then have a corrugated drainer, made of copper or galvanized iron, with one end resting just over the edge of sink and slanting in that direction so it will drain itself. It is very hard to keep glasses clean without running water, and there is nothing that will drive away a customer quicker than serving your drinks in dirty glasses.

NO. 23.

If flowers are plentiful and cheap, a nice bouquet of fresh cut flowers on your counter every morning will add to the appearance of the surroundings. In fact, any little thing which suggests itself to your mind that is pleasing to the eye and will beautify the appearance of the fountain and dispensing counter will help to draw trade.

NO. 24.

Look After the Re-Lining, or Re-Tinning, of your Fountains.

It is very important that you should examine your copper or steel founts at least once each year, to see if they need relining. After unscrewing the cap or head of fount you can easily ascertain, by means of a lighted candle attached to a piece of wire and inserted in the opening, whether or not the lining is in good condition. When you find dark spots of a greenish tint in the lining, you may know it is unsafe to use the fount longer until it is thoroughly overhauled and re-lined.

Founts used for mineral waters need attention much oftener than those used for plain soda. The salts act on the block tin much quicker than the carbonic acid does.

The action of the acid on the copper, after the lining is gone, forms verdigris, which, as we all know, is not "conducive to good health" when taken ad-libitum.

NO. 25.

List of Drinks.

A good plan to avoid answering innumerable questions as to what drinks you serve, and the price of same, is to make out a complete list giving price of each drink, and have printed in large type on a neat piece of heavy card board, which should be suspended directly over the dispensing counter in such a position that the customer can't help seeing and reading it.

NO. 26.

The Base of Nearly all Flavored Sprups.

There are three important ingredients which should form the base of nearly all flavored syrups.

Simple Syrup, Gum Foam and Fruit Acid.

NO. 27.

Simple Syrup.

Best Granulated Sugar	6 lbs.
Pure Filtered Water, enough for	1 gal.

Make by the cold process of percolation, as syrup made cold will keep longer than if made by heat. A very simple and convenient way of making it is to use a 10 gallon keg, taking out the head. Into this put 30 pounds sugar and then add water till keg is half full, using a wooden paddle to stir with, the sugar will soon dissolve if stirred occasionally, leaving a clear nice syrup. Strain before using.

NO. 28.

Gum Foam.

Soap Bark Root	4 oz.
Glycerine	4 "
Pure Water	12 "

Pack the soap bark firmly in a conical glass percolator, and add the glycerine and water, previously mixed, allowing same to macerate for two or three hours. Use a small amount of absorbent cotton in bottom of percolator, to allow the liquid to pass through, which will make it clear enough for use. To allow the mixture to macerate, insert a cork in small end of percolator, and cover top with anything suitable for the purpose. When it has stood long enough, pull out the cork and let the liquid pass through into a glass jar or bottle. It is then ready for use.

NO. 29.

Fruit Acid.

Citric Acid	16 oz.
Filtered Water	16 "

Mix, and when acid is all dissolved run through cotton to free it from any particles of dirt which may be in the acid.

Fruit acid should always be used in all syrups made from fruit juices, to bring out the flavor of the fruit. For instance, in making Pineapple, Strawberry, Raspberry, Orange, Cherry, etc., if you do not use a little fruit acid you will find your syrup when mixed with the carbonated water is flat and insipid and comparatively tasteless, and, while you may detect the flavor of the juice used, yet you will notice there is something lacking. By the addition of one-half ounce of fruit acid to the gallon of syrup you will readily notice the improvement it makes.

Gum foam is used to take the place of Cooper's Gelatine, or the white of eggs, for producing a nice creamy foam on soda that will last. It is an improvement on either of the latter, because it can be used in syrup made by the cold process, while gelatine or egg has to be added when the syrup is hot. You will notice my formula for gum foam contains no alcohol, while others made for the purpose do. Alcohol takes the life out of the *foam*, and as water and glycerine are sufficient to extract the principle required from the soap bark, it is unnecessary to use alcohol.

PLAIN AND FANCY SYRUPS.

NO. 30.

Ambrosia.

Raspberry Syrup	2 pts.
Vanilla Sprup	2 "
Claret Wine (St. Julien)	4 oz.
Gum Foam	1 "

Mix.

NO. 31.

Banana.

Banana Extract	1 oz.
Fruit Acid	½ "
Simple Syrup	1 gal.
Gum Foam	1 oz.

Mix.

NO. 32.

Chocolate No. 1.

Take ½ pound Baker's Chocolate, powder fine in a mortar, rub it thoroughly with a little hot water till a smooth, fine paste is formed, then add sufficient water to make the whole measure 1 gallon. Add 12 pounds granulated sugar and heat over a slow fire until dissolved. Strain through flannel, and when cold add I ounce *Ext. Vanilla.*

NO. 33.

"Saxe's Chocolate" No. 2.

Put ¾ pound Baker's chocolate, whole, into 1 quart hot water, bring to a boil, allowing chocolate to dissolve without being powdered first, then boil till the mixture is quite thick, when it is allowed to cool, and while cooling rub carefully with a wooden spoon, or pestle, to make it smooth and even. Add enough syrup to make one gallon and allow to stand for two hours in an open vessel, you will then notice a greasy substance or scum which rises to the surface, this should be removed and after adding ½ ounce vanilla extract, you will have as nice a chocolate syrup as one could ask for, and besides, it will not separate like the ordinary chocolate syrup.

NO. 34.

Yabara Chocolate.

Too Expensive for 5c. Soda but Very Fine.

Take 3 pounds best sweet chocolate (vanilla flavor) add to 1 quart boiling water, when dissolved add 1 gallon pure cream, bring to a boil and then add 12 pounds granulated sugar. Stir with wooden spoon until thoroughly dissolved and mixed. Allow to cool, and then keep on ice, but not in syrup can, as it is too thick to draw nicely.

NO. 35.

Coffee Syrup.

Take 1 pound best Mocha and Java coffee mixed, and ground rather coarse, put into a gallon percolator with a little absorbent cotton in bottom. Put 12 pounds granulated sugar in porcelain lined kettle or pan, holding from two to three gallons, place same directly under percolator, then pour boiling water on to coffee and allow to percolate through on to the sugar while hot, until enough has passed through to make two gallons syrup. Stir with wooden spoon until all is dissolved, then add two ounces gum foam, and it is ready for use. This makes the best coffee syrup I have ever used, and givese universal satisfaction.

NO. 36.

Red Currant.

Red Currant Juice (A. H. Peloubet's)	10 oz.
Fruit Acid	¼ "
Gum Foam	1 "
Simple Syrup, enough for	1 gal.

Mix.

NO. 37.

Canton Ginger Syrup.

Ginger Fruit Extract (B. & C.'s)	6 oz.
Fruit Acid	1 "
Simple Syrup	1 "

Mix and draw still.

NO. 38.

Crab Apple Cider Syrup.

Crab Apple Champagne Juice (B. & C.'s)		7 oz.
Simple Syrup	add	1 gal.

Mix and serve still.

NO. 39.

Diamond Syrup.

Vanilla Syrup	1 pt.
Pineapple Syrup	1 "
Lemon Syrup	1 "
Honey, strained	2 oz.
Fruit Acid	⅛ "
Eggs, well beaten	3 in number.
Gum Foam	3 teaspoonfuls.
Phospho-Guarana Syrup	1 pt.

Mix.

This makes an excellent combination and a good seller.

NO. 40.

Cream Syrup.

Fresh Cream	½ pt.
Fresh Milk	½ "
Powdered Sugar	1 lb.

Mix by shaking, and to keep from souring add a few grains bi-carbonate soda. Keep in a cool place.

NO. 40½.

Don't Care Syrup.

Good Brandy	½ pt.
Simple Syrup	1 gal.
Gum Foam	1 oz.
Fruit Acid	¼ "

Mix.

NO. 41.

Ginger Syrup.

Extract Jamaica Ginger (see formula below)	1 oz.
Fruit Acid	3-8 oz.
Gum Foam	1 oz.
Simple Syrup	1 gal.
Caramel enough to color.	

Mix.

NO. 42.

Extract Jamaica Ginger—For Ginger Syrup.

Jamaica Ginger in coarse powder	2 lbs.
Alcohol, pure	½ gal.

Pack the ginger (dry) in a conical glass percolator with small piece of absorbent cotton at bottom. Pour on the alcohol and allow to pass through into a glass bottle. After all has gone through that will, pour on about 1 quart filtered water to drive out the remaining alcohol, and when the finished extract measures ½ gallon, remove the percolator and add to the extract enough caramel, if necessary, to give it a reddish brown color. It is then ready for use and is much better than when made from African ginger.

NO. 43.

Ginger Ale, "Belfast."

Ginger Ale Extract (B. & C.)	6 oz.
Fruit Acid	2 "
Simple Syrup enough for	1 gal.

Mix, and use in the proportion of 1 ounce syrup to 7 ounces soda in mineral glass, drawing soda first and stirring with a spoon.

The B. & C. extract is made by Beach & Clarridge, of Boston, manufacturing chemists, and is by far the best I have ever used, making a drink so near like the imported *Belfast Ale* that it is hard to distinguish the difference. I have a large trade on this drink.

NO. 44.

Ginger Fruit.

Ginger Fruit Extract (B. & C.'s)	6 oz.
Fruit Compound "	10 "
Simple Syrup, enough for	1 gal.

Mix, and serve the same as ginger ale. All fancy syrups should be 10 cents a glass, though there is a good profit on them at 5 cents.

NO. 45.

Ginger Fizz.

This drink is made the same as ginger fruit, only you add a small spoonful of powdered sugar, which makes the fizz.

NO. 46.

Hock or Claret Syrup.

Hock or Claret Wine	1 pt.
Simple Syrup	2 "

Gum Foam	½ oz.

Mix.

NO. 47.

"Honey Dew."

Brandy	2 oz.
Catawba Wine	4 "
Essence of Cloves	½ "
Strawberry Juice	4 "
Blood Orange Extract	½ "
Pineapple Juice	4 "
Essence Rose	1 "
Essence Mace	¼ "
Gum Foam	2 "
Simple Syrup, enough for	2 gals.

Mix.

NO. 48.

Jamaica Ginger Wine.

Jamaica Ginger Wine (made by A. D. Putter & Sons, Boston)	2 oz.
Carbonated Water	6 "
Acid Phosphate	1 teaspoonful.
Powdered Sugar	1 "

Mix, and serve still.

NO. 49.

"Klub Soda."

Klub Soda Extract (B. & C.'s)	2 oz.
Fruit Acid	2 "
Gum Foam	1 "
Blood Orange Color	½ "
Simple Syrup, enough for	1 gal.

Mix.

NO. 50.

Saxe's Best Lemon Syrup.

Oil of Lemon, best	28 drops.
Citric Acid	1¼ ozs.
Simple Syrup	1 gal.
Tr. Curcuma enough to color.	
Gum Foam	1 oz.

Powder the citric acid in a mortar and add the oil of lemon, rub thoroughly till the oil is cut, then add syrup, gum foam and coloring. *Liebman & Butler's* best oil lemon will produce the finest flavor. It is very expensive, costing $9.00 per pound, but as it is warranted not to spoil, and as fifteen drops will give better results than twenty-eight (28) drops of any other oil in the market, I consider it the cheapest in the end. I have made lemon syrup from a number of different formulas but have never yet found one to equal the above, or that could be made for less money. Below I give a formulæ for making Tr. of Curcuma, which if carefully used will give the exact color lemon syrup should be. Only a few drops to the gallon are necessary.

NO. 51.

Tr. Curcuma.

Curcuma Root in powder	3 oz.
Dilute Alcohol enough to make	1 pt.

Moisten the powder with 2½ ounces of dilute alcohol and macerate for 2 hours, then pack it firmly in a cylindrical percolator and gradually pour dilute alcohol upon it until two pints of tincture are obtained.

NO. 52.

Lemon Sherbet.

Lemon Syrup	2 pts.
Sherbet Syrup	2 "

Mix.

NO. 53.

Mountain Dew.

Brandy	½ pt.
Ess. Nutmeg	1 oz.
Extract Vanilla	1 oz.
Phospho-Guarana Syrup	1 pt.
Fruit Acid	½ oz.
Gum Foam	1 oz.
Simple Syrup enough for	1 gal.

Mix and color to suit.

NO. 54.

Mountain Pink.

Phospho Guarana Syrup	1 pt.
Spts. Juniper	4 ozs.
Lemon Syrup	1 pt.
Fruit Acid	2 ozs.
Gum Foam	1 oz.
Simple Syrup enough for	1 gal.

Mix.

NO. 55.

Mexican Sarsaparilla.

Fruit Acid	¾ oz.
Essence Sarsaparilla	¼ "
Fld. Ext. Gentian (plain)	¼ "
Fld. Ext. Sarsaparilla (comp.)	¼ "
Gum Foam	1 "
Caramel enough to color.	
Simple Syrup	1 gal.

Mix. *This syrup is similar to Moxie and is a good seller. Try it.*

NO. 56.

Essence for Mexican Sarsaparilla.

Oil Wintergreen	1 oz.
Oil Sassafras	1 "
Alcohol	4 "

Mix.

NO. 57.

Nectar Extract No. 1.

Oil Rose (Kiss)	6 drops.
Oil Bitter Almonds	6 "
Vanilla Extract	1½ ozs.
Lemon Oil	60 drops.
Alcohol	1 oz.

Mix.

NO. 58.

Nectar Syrup No. 1.

Extract Nectar	¼ oz.
Raspberry Juice	6 "
Gum Foam	1 "
Fruit Acid	½ "
Simple Syrup enough for	1 gal.

NO. 59.

Nectar Syrup No. 2.

Strawberry Syrup	1 qt.
Orgeat Syrup	1 "
Madeira Wine	4 oz.
Gum Foam	½ "

Mix.

NO. 60.

Nectarine.

Nectar Syrup	½ gal.
Lemon Syrup	1 pt.
Vanilla Syrup	1 "
Simple Syrup enough for	1 gal.
Gum Foam	¼ oz.
Color with B. & C.'s Fruit Color.	

Mix.

NO. 61.

Orgeat Syrup.

Ess. Almonds	44 drops.
Simple Syrup	3 qts.
Gum Foam	¾ oz.

Mix.

NO. 62.

Orange Syrup.

Extract Orange, Saxe's formula	1½ oz.
Fruit Acid	½ "
Gum Foam	1 "
Simple Syrup	1 gal.

Mix. This is fine.

NO. 63.

Saxe's Orange Extract (Unequaled).

Grated Peel of 60 Oranges.	
Water	3 qts.
Alcohol	3 "
Glycerine	6 ozs.

Macerate from two to four weeks, then add oil orange best, 1 ounce, and then strain through flannel. This makes the finest orange flavor for orange syrup and for orange phosphate, I have ever used, and at about one-third the cost of any other first-class extract in the market.

NO. 64.

Orange Sherbet.

Orange Syrup	1 qt.
Sherbet Syrup	1 "

Mix and draw still.

NO. 65.

Blood Orange Phosphate Syrup.

Best in the Market.

Raspberry Juice	6 oz.
Extract of Orange, (Saxe's formula)	1½ "
Fruit Acid	¾ "
Simple Syrup enough for	1 gal.

Mix.

The combination of the raspberry juice with the orange extract makes the finest flavored orange phosphate in the world. The acid phosphate is added when the drink is served. My customers often ask why my orange phosphate is so much finer than that made by other dispensers. The reason is, we know how to make it.

NO. 66.

Opera Bouquet.

Phospho-Guarana	
Simple Syrup	1 pt.
Sherry Wine	1 pt.
1 Lemon cut in thin slices.	1 pt.

Mix and allow to stand 12 hours, then strain and add

Gum Foam	
Fruit Acid	⅛ oz.
	¼ "

NO. 67.

Pineapple Syrup No. 1.

Pineapple Juice (the best)	12 oz.
Fruit Acid	½ "
Gum Foam	1 "
Simple Syrup enough for	1 gal.

This gives the true flavor of the pineapple.

NO. 68.

Pineapple Syrup No. 2.

Cheaper than No. 1 *and very good.*

Fruit Juice of Pineapple	6 oz.
Fruit Acid	½ "
Extract of Pineapple	½ "
Gum Foam	1 "
Syrup enough for	1 gal.

Mix.

NO. 69.

Raspberry Syrup No. 1.

Raspberry Juice	12 oz.
Fruit Acid	3-8 "
Gum Foam	1 "
Simple Syrup enough for	1 gal.

Fruit Color a few drops.

Mix.

NO. 70.

Raspberry Syrup No. 2.

Raspberry Juice	6 oz.
Extract Raspberry	½ "
Fruit Acid	3-8 "
Gum Foam	1 "
Simple Syrup	1 gal.

Mix.

NO. 71.

Razzle Dazzle Syrup.

Nectar Syrup	1 pt.
Strawberry Syrup	½ "
Lemon Syrup	½ "
Phospho-Guarana Syrup	½ "
Jamaica Ginger Wine	½ "
Essence Nutmeg	15 drops.
Simple Syrup enough for	1 gal.

Mix.

NO. 72.

Strawberry Syrup No. 1.

Pure Fruit Juice of Strawberries (A. H. P.'s)	12 oz.
Fruit Acid	½ "
Gum Foam	1 "
Simple Syrup enough for	1 gal.

Mix and add a few drops of fruit color if necessary.

NO. 73.

Strawberry Syrup No. 2.

Strawberry Juice (A. H. P.'s)	6 oz.
Ext. Strawberry	½ "
Fruit Acid	½ "
Gum Foam	1 "
Syrup Simplex	1 gal.

Fruit Color a few drops.

Mix.

NO. 74.

Swizzle Fizz Syrup.

Jamaica Ginger Wine (Puffer's)	1 qt.
Phospho-Guarana Syrup	1 "

Mix, and draw mineral glass ⅞ full plain soda, add one ounce above syrup, a little acid phosphate and small teaspoonfull powdered sugar. *Stir.* Good drink in the morning.

NO. 75.

Solferino.

Wild Grape Juice (A. H. P.'s)	6 oz.
Strawberry Syrup	1 pt.
Phospho-Guarana Syrup	1 "
Gum Foam	1 oz.
Fruit Acid	½ "
Simple Syrup enough for	1 gal.

Mix.

NO. 76.

Sherbet No. 1.

Port Wine	8 oz.
Catawba Wine	8 "
Vanilla Syrup	2 pt.
Pineapple Syrup	2 "
Gum Foam	1 "

Fruit Acid	¼ "

Mix. This makes a very pleasant drink.

NO. 77.

Sherbet No. 2.

Vanilla Syrup	3 pt.
Pineapple Syrup	1 "
Lemon Syrup	1 "
Gum Foam	½ oz.
Fruit Acid	½ "

Mix.

NO. 78.

Sarsaparilla Syrup.

Ext. Sarsaparilla	¼ oz.
Gum Foam	1 "
Fruit Acid	¼ "
Caramel to color.	
Simple Syrup	1 gal.

Mix.

NO. 79.

Extract Sarsaparilla.

For Sarsaparilla Syrup.

Oil Wintergreen	1 oz.
Oil Sassafras	1 "
Alcohol	6 "
Caramel a few drops.	

Mix.

NO. 80.

Vanilla Syrup.

Extract Vanilla	1½ oz.
Fruit Acid	¼ "
Gum Foam	1 "
Simple Syrup enough for	1 gal.

Mix.

NO. 81.

Vanilla Cream Syrup.

Extract Vanilla	1 oz.
Simple Syrup	3 pt.
Rich Milk	1 "

Mix.

NO. 82.

Wild Grape.

Wild Grape Juice (A. H. Peloubet's)	10 oz.
Fruit Acid	½ "
Gum Foam	1 "
Simple Syrup enough for	1 gal.

Mix.

NO. 83.

Fancy Mixed Drinks.

In making fancy drinks, such as Egg Phosphate, Egg Lemonade, Plain Lemonade, &c., it is necessary to have a small outfit for mixing, consisting of a long nickel or silver plated shaker, one long silver mixing spoon, one 12-ounce mixing glass, one spoon strainer and one lemon squeezer. In some of these drinks we use carbonated water, and in others, simply filtered water. As carbonated water cannot be shaken in the "mixer" we use cracked ice with the drinks that require carbonated water, and pour back and fourth from the mixing glass into the mixer, till the drink is in good shape, then strain and serve.

NO. 84.

Almond Sponge.

Put about 1 ounce orgeat syrup in mixing glass, fill half full cracked ice, add about a tablespoonful powdered sugar, and enough strawberry syrup to color, then fill the glass with fresh milk, and shake the mixture thoroughly till you have a rich, creamy foam on the top about an inch deep, then strain into soda glass, holding the shaker containing the liquid as high as possible over the glass to put a *bead* on the drink. After drink is made, shake a little powdered nutmeg on top, and it is ready to serve.

The above rule for mixing will apply to nearly all fancy drinks, except when using carbonated waters, then in place of shaking the mixture, pour from one glass to the other.

NO. 85.

Boston Flip.

Use one ounce don't care syrup, one whole egg, teaspoonful lemon juice, half teaspoonful acid phosphate, tablespoonful sugar, (or more if necessary), a little cracked ice. Then fill glass with plain soda and proceed as in making almond sponge, only do not shake the drink.

NO. 86.

Chocolate Phosphate.

One ounce Chocolate Syrup, little Acid Phosphate, cracked ice, and plain soda, no nutmeg.

NO. 87.

Coca Phosphate.

Syrup Coca 1 ounce, Acid Phosphate, cracked ice, plain Soda, no nutmeg.

NO. 88.

Coca Phosphate Syrup.

Coca Phosphate (made by Coca Phosphate Co., Chicago)	4 oz.
Simple Syrup	2 qt.
Gum Foam	½ oz.

Mix.

NO. 89.

Coca Egg Phosphate.

One ounce Syrup Coca Phosphate, 1 egg, a little Acid Phosphate, cracked ice and plain soda. Mix same as Boston flip.

NO. 90.

Charlotte Russe.

One ounce Don't Care Syrup, ¼ ounce Orgeat Syrup, cracked ice, two small pieces. Fill the glass with milk and shake thoroughly, then strain and on top of this put about a tablespoonful of whipped cream, then a little nutmeg, and serve, putting a spoon in glass for customer.

NO. 91.

Coffee Bousshea.

Coffee Extract (concentrated) 1½ ounce, little cracked ice, tablespoonful sugar, then fill the glass with milk, shake well, strain and serve with a little nutmeg.

NO. 92.

Coffee Extract (Concentrated).

Mocha and Java, (equal parts, ground) 1 pound. Moisten with 8 ounces of hot water, pack in a cylindrical percolator and pour on sufficient boiling water to make the finished extract measure two quarts, then bottle and keep in a cool place.

NO. 93.

Saxe's Cream Shake..

Very Fine.

Take 1½ ounces Don't Care Syrup, a little cracked ice. Fill the glass with half milk and half cream, shake very hard for two or three minutes, strain into a long, thin mineral glass, if convenient, and then add a little grated nutmeg. This makes a very rich and especially pleasant drink for the ladies. Cream and milk shakes are made in many ways by the different dispensers, some using one flavor and some another, while the majority give the customers any flavor they ask for, or rather ask them what flavor they would like. This is a mistake. 1st: Because the customer hardly ever knows what flavor to ask for, or what makes a good combination; 2nd: Because it wastes lots of valuable time waiting for the customer to decide; and 3d: If you have your own combination and stick to it, you will have a little different drink from your competitor, and if the combination is a good one, will work up a nice trade on Milk and Cream Shakes. I use my Don't Care Syrup in both of these drinks, because it makes a combination that is hard to beat and my customers seem to appreciate it.

I sell my "Milk Shake" for 10 cents, while my competitors sell for 5 cents, yet I sell more Milk Shakes in one day than all the others put together. Cream Shake I get 15 cents for.

NO. 94.

Egg Phosphate.

Lemon Syrup 1 ounce, Acid Phosphate 1 teaspoonful, 1 egg, 2 or 3 lumps of ice, shake well together before adding the soda, to thoroughly mix the egg with the syrup, then add the plain soda and pour from glass to shaker several times, strain and add little nutmeg. This rule will apply in making all egg drinks.

NO. 95.

Egg Lemonade.

Take the juice of 1 Lemon, 1 whole egg, about a teaspoonful sugar, a little cracked ice, 1 ounce plain water, shake well, then add soda and strain, using a little nutmeg on top.

NO. 96.

Egg-Nog.

One ounce Don't Care Syrup, ½ ounce Jamaica Ginger Wine, cracked ice, a little sugar, 1 egg, shake well, then add enough milk to fill the glass, and shake again, strain, grate a little nutmeg on top and serve.

NO. 97.

Egg Chocolate.

Chocolate Syrup 1 ounce, 1 egg, cracked ice, shake and add plain soda, and proceed as in making Egg Phosphate.

NO. 98.

Egg Calisaya.

Lemon Syrup 1 ounce, Elixir Calisaya Bark 1 teaspoonful, a little Acid Phosphate, 1 egg, cracked ice, shake well, then add plain Soda, strain and serve with nutmeg.

NO. 99.

Egg Flip.

One egg, cracked ice, ½ ounce Lemon Syrup, 1 ounce Phospho Guarana Syrup, 1 teaspoonful Acid Phosphate, shake and add soda, same as in Egg Phosphate.

NO. 100.

Frozen Cream.

This drink is made the same as a Cream Shake. Only leave the ice in the glass, using very fine cracked ice, and serve with a spoon.

NO. 101.

Flowing Stream.

Mountain Dew Syrup 1 ounce, Orgeat Syrup 1½ ounce, cracked ice, pure milk, shake and strain, use nutmeg.

NO. 102.

Golden Fizz.

Don't Care Syrup 1 ounce, Phospho-Guarana Syrup ½ ounce, Jamaica Ginger Wine ½ ounce, one whole egg, teaspoonful Acid Phosphate, cracked ice, shake, add soda and strain, use nutmeg.

NO. 103.

Ice Cream Shake.

Mix same as Cream Shake and add heaping teaspoonful of ice cream.

NO. 104.

Lime Juice Flip.

Lime Juice ½ ounce, Syrup of Phospho-Guarana 1 ounce, 1 whole egg, cracked ice, teaspoonful Acid Phosphate, tablespoonful sugar, shake and then add soda, strain and then add nutmeg. Then serve.

NO. 105.

Milk Shake..

Don't Care Syrup 1 ounce, cracked ice half glass, milk enough to fill glass, shake thoroughly, then strain and add a little grated nutmeg. This makes the finest Milk Shake in the country.

NO. 106.

Mint Julip.

Fill glass half full of cracked ice, add tablespoonful powdered sugar, a few sprigs of fresh mint, press to side of glass to get the flavor, add 1 ounce of Don't Care Syrup, then fill the glass with soda and stir with spoon. Don't shake. Add 1 or 2 fresh strawberries or a piece of orange, leave ice in glass and let customer use your strainer when drinking.

NO. 107.

Orgeat a la Egg.

Orgeat Syrup 1 ounce, little cracked ice, 1 whole egg, proceed same as in making Egg Phosphate.

NO. 108.

Punchine.

One ounce Syrup of Punchine, little cracked ice, milk. Shake, strain and add nutmeg.

NO. 109.

Punchine Syrup.

Punchine Extract (B. & C.'s) 8 ounces, Fruit Acid ½ ounce, Simple Syrup enough for 1 gallon. Color with Fruit Color. Mix.

NO. 110.

Pineapple Smash.

Pineapple Syrup 1 ounce, powdered sugar 1 teaspoonful, cracked ice ½ glass, add enough plain soda to fill glass. Stir with spoon and strain into thin mineral glass containing a piece of pineapple fruit. Serve.

NO. 111..

Raspberry Cordial.

Raspberry Vinegar ½ ounce, Raspberry Syrup 1 ounce, little cracked ice, fill glass with soda, stir with spoon and strain into mineral glass.

NO. 112.

Raspberry Vinegar.

Raspberry Juice (Peloubet & Co.)	8 ozs.
Cider Vinegar	2 "

Mix.

NO. 113.

Roman Punch.

Tumbler half full cracked ice, Don't Care Syrup ½ ounce, teaspoonful lemon juice, juice of half an orange, teaspoonful sugar, add soda, mix with spoon and strain. Add strawberry or a piece of pineapple.

NO. 114.

Silver Fizz.

Don't Care Syrup 1 ounce, Phospho-Guarana Syrup ½ ounce, the white of an egg, little cracked ice, teaspoonful lemon juice. Shake well and add half milk and half soda to fill glass.

Mix same as Egg-Phosphate and strain, adding a little nutmeg.

NO. 115.

Sherbet de Egg.

Sherbet Syrup 1 ounce, 1 whole egg, a litte Lemon Juice, little Acid Phosphate, cracked ice. Shake. Add soda and strain.

NO. 116.

Strawberry Glaze.

Make same as Pineapple Smash, only use Strawberry Syrup instead of Pineapple.

NO. 117.

Seltzer Lemonade.

Juice of 1 whole lemon, tablespoonful sugar, little cracked ice, stir with spoon, add Seltzer Water, stir again and strain.

NO. 118.

Tulip Peach.

Make the same as Strawberry Glaze, using Peach Syrup in place of Strawberry.

NO. 119.

Vichy Egg Shake.

Take 1 whole egg, cracked ice, and about 1 ounce of filtered water. Shake thoroughly and strain into tall mineral glass, then add Vichy water slowly till glass is full, stirring with spoon while drawing the Vichy. This is a great morning drink.

NO. 120.

Still Drinks.

These are made by drawing Soda first and then adding the Syrup, stirring with a spoon and serving in mineral glass.

For instance, in making

NO, 121.

Orange Ade.

Draw mineral glass ⅞ full plain Soda, then add orange syrup 1 ounce, and stir with spoon, then serve.

Pineapple, Raspberry, Strawberry, &c., are made in the same way.

NO. 122.

Sour Drinks.

These are served still like the "Ades" in mineral glass, but contain besides the Syrup either Phosphate, Lemon Juice, Lime Juice or Lactart.

NO. 123.

Cranberry Phosphate.

(*Very Fine.*)

Plain Soda	7 oz.
Cranberry Syrup	1 "
Acid Phosphate	1 teaspoonful.

Mix and serve.

NO. 124.

Cranberry Syrup.

Cranberry Juice	10 oz.
Fruit Acid	½ "
Gum Foam	1 "
Simple Syrup	1 gal.

Mix.

NO. 125.

Lemon Phosphate.

Serve same as above, using Lemon instead of Cranberry Syrup.

NO. 126.

Lactart.

This is an Acid similar to the Acid Phosphate, made in Boston, and put up in ½ pint bottles. It can be used in same proportion as Acid Phosphate in making Still Drinks. Lemon and Orange Lactart are very nice drinks.

NO. 127.

"Saxe's Orange Phosphate."

(*The Great and only true Phosphate made.*)

Plain Soda	7 oz.
Saxe's Blood Orange Syrup	½ "
Acid Phosphate	1 teaspoonful.

Mix.

NO. 128.

Pineapple Phosphate.

Plain Soda	7 oz.
Pineapple Syrup	1 "
Acid Phosphate or Lactart	1 teaspoonful.

Mix. Peach, Strawberry, Raspberry, &c., are made in the same way.

NO. 129.

Vichy Phosphate.

Draw mineral glass nearly full Vichy water, then add teaspoonful Acid Phosphate. Stir with spoon and serve.

NO. 130.

Lemon Ice.

Juice of 6 Lemons	
Fruit Acid	⅛ oz.
Granulated Sugar	3 lbs.
Water enough to make	1 gal.

Mix. and keep in porcelain lined jar, serve in mineral glass.

NO. 131.

Orange Ice.

Juice of 3 Lemons	
Juice of 3 Oranges	
Extract Orange	¼ oz.
Fruit Acid	⅛ "
Water enough for	1 gal.

Mix. Serve same as Lemon Ice.

NO. 132.

Tonic Drinks.

No. 1.

Angostura.

Plain Soda	7 ozs.
Simple Syrup	1 oz.
Angostura Bitters about	⅛ "
Acid Phosphate	⅛ "

Mix and serve.

No. 2.

Calisaya.

Plain Soda	7 ozs.
Lemon Syrup	1 oz.
Elixir Calisaya Bark	⅛ "
Acid Phosphate	⅛ "

Mix and serve.

No. 3.

Coca-Calisaya.

Plain Soda	7 ozs.
Syrup Coca Phosphate	1 oz.
Acid Phosphate	⅛ "
Elixir Calisaya	⅛ "

Mix and serve.

NO. 132½.

Peruvian or Ottawa Beer.

Peruvian Beer Extract (Tuft's)	8 ozs.
Granulated Sugar	8 lbs.
Cold Water	10 gals.

Put in a 12-gallon fountain and charge to pressure of 150 pounds. Draw through Mineral Draught Tube into a large pitcher, allow time to settle, then pour out about two-thirds glass of full, solid liquid, and fill glass from the Draught Tube

This makes a very nice drink.

NO. 133.

Carbonated Mineral Waters.

There are any number of formulas in the market for making artificial Mineral Waters, but very few of them are worthy of attention.

I give below two formulas, which I know from experience *to be* good. It is not necessary to keep on draught more than two minerals, to be able to serve any kind a customer calls for. Vichy will answer for High Rock, Deep Dock, or Seltzer, and Apollinaris for Kissingen, or Congress Water.

NO. 134.

Apollinaris Water.

Chloride Soda	grain 280.
Sulphate Soda	180.
Carbonate Magnesia	260.
Carbonate Soda	760.
Carbonated Water	pints 4.

Mix and add to 9½ gallons water, then charge.

No. 135.

Vichy Water.

Potass Sulphate	grains 120.
Sodium "	" 80.
" Phosphate	" 50.
" Chloride	" 360.
" Bi-carbonate	" 2187.
Ammonia Carbonate	" 10.
Carbonic Acid Water	pints 4.

Mix and let stand for twelve hours, then filter and add to 9½ gallons water. Charge.

NO. 136.

Vanilla Ice Cream.

Granulated Sugar	1¼ pounds.
Whole Eggs	9 in number.
Fresh Milk	1 gal.
Extract Vanilla	1½ oz.

Mix sugar and egg together, using an Egg Beater, add milk and partly freeze before adding the Extract Vanilla.

This will make very nearly two gallons very fine Ice Cream, when frozen, and at a much less cost than it can be bought for.

NO. 137.

Extract Vanilla.

Vanilla Bean (long)	¾ oz.
Tonka "	¼ "
Granulated Sugar	1 "
Dilute Alcohol	½ pt.
Simple Syrup	½ "

Cut the Vanilla and Tonka Bean into small pieces, put in a mortar with the sugar and bruise, then put into a two quart bottle and allow to macerate for two weeks, shaking the bottle two or three times each day. After that filter and add the Syrup, and enough caramel to give the desired color.

NO. 138.

Strawberry Ice Cream.

Whole Eggs	9 in number.
Pure Cream	2 qts.
Granulated Sugar	½ lb.
Milk	1 qt.
Concentrated Syrup Strawberry	1½ pts.
Fruit Acid	¼ oz.

Beat egg and sugar together thoroughly, add cream and milk, beating thoroughly again, then add the Concentrated Syrup previously mixed with the Fruit Acid and freeze. This makes 2 gallons very fine Strawberry Ice Cream, and costs on an average, not including labor, about 50 cents per gallon.

NO. 139.

Concentrated Strawberry Syrup.

Strawberry Juice	12 ozs.
Cut Loaf Sugar	1½ lbs.

Heat the juice in a porcelain lined kettle, add the sugar, stir, boil for a moment only and strain, then put in a strong bottle, cork tightly and keep in cool place until used.

NO. 140.

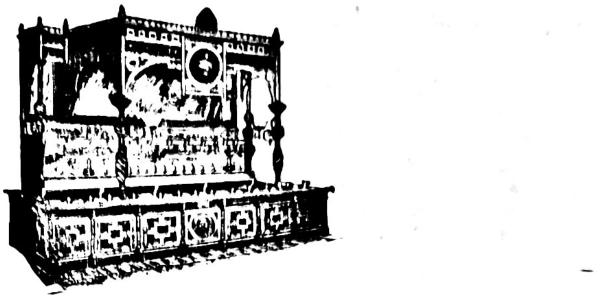
Concentrated Pineapple Syrup.

Make same as Strawberry Syrup, only use Pineapple Juice.

NO. 141.

In opening a bottle of Fruit Juice in hot weather, for making syrup, either make enough syrup to use the entire contents of the bottle, or else make into a concentrated syrup, as the ordinary juice will soon spoil when once opened and exposed to the air.

If my instructions in regard to making *syrups* and in mixing fancy drinks are closely followed, a new man in the business can soon learn to be an expert. A little good common sense and a natural tendency to be neat and quick about your work, with the aid of "*Saxe's Guide*," is all you need.



Dick's Encyclopedia of Formulas and Processes 1872

Syrups for Soda or Mineral Waters.

The following is a collection of well approved receipts for flavoring mineral waters, selected principally from the "Druggist's Circular and Chemical Gazette." Most of the syrups not made from fruits may have a little gum-arabic added, in order to produce a rich froth when the soda water is added.

1385. **Simple Syrup.** To 8 pounds finest white sugar, add 2 quarts water and the whites of 2 eggs; stir until all the sugar is dissolved; simmer for 2 or 3 minutes; skim well, and strain through a fine flannel bag. The following syrups for soda water may be produced by employing the above syrup as a basis. A variety of other syrups may be made in the same way by using the artificial fruit essences. (*Sec No.* 1045, *also last receipt.*)

1386. **Simple Syrup.** White sugar, 10 pounds; water, 1 gallon; isinglass (best), ¼ ounce (or, the white of an egg). Dissolve the isinglass in hot water, and add it to the hot syrup. The syrup is to be made with gentle heat, and then strained.

1387. **Lemon Syrup.** Add to simple syrup, when cold, 20 drops fresh oil of lemon and ½ ounce citric acid (previously dissolved in 3 ounces water) to each gallon. Mix by shaking well in a bottle, then add 4 ounces gum solution, made by dissolving 2 ounces fine white gum-arabic in 2 ounces warm water.

1388. **Lemon Syrup.** Grate off the yellow rind of lemons, and beat it up with a sufficient quantity of granulated sugar. Express the lemon juice, add 1 pint water to each pint of juice and 3½ pounds granulated sugar, including that rubbed up with the rind; warm until the sugar is dissolved, and strain.

1389. **Sarsaparilla Syrup.** To 1 gallon simple syrup add 10 drops oil of anise, 20 drops oil of wintergreen, 20 drops oil of sassafras, and 6 ounces caramel, or coloring. Before the oils are added to the syrup, they should be cut by grinding them in a mortar, with as much sugar as they will moisten, or mixed with a small quantity of strong alcohol.

1390. **Sarsaparilla Syrup.** Take oil of wintergreen, 10 drops; oil of anise, 10 drops; oil of sassafras, 10 drops; fluid extract of sarsaparilla, 2 ounces; simple syrup, 5 pints; powdered extract of liquorice, ½ ounce; mix well.

1391. **Parrish's Syrup of Sarsaparilla for Mineral Waters.** Take simple syrup, 4 pints; compound syrup of sarsaparilla, 4 fluid ounces; caramel, 1½ ounces; oil of wintergreen, 6 drops; oil of sassafras, 6 drops; mix.

1392. **Ginger Syrup.** Bruised Jamaica ginger, 2 ounces; boiling water, 1 pint; macerate for 4 hours; add fine white sugar, 2 pounds, and strain through a fine flannel bag. Ginger syrup may also be made by adding 2 ounces extract of ginger to 1 gallon simple syrup.

1393. **Ginger Syrup.** Tincture of ginger, 2 fluid ounces; simple syrup, 4 pints; mix.

1394. **Vanilla Syrup.** Vanilla, 6 drachms; boiling water, 4½ pints; sugar, 4 pounds avoirdupois. Reduce the vanilla to fine powder by trituration with a portion of the sugar; boil this with water for 2 hours in a covered vessel, then strain.

1395. **Vanilla Syrup.** Fluid extract of vanilla, 1 ounce; citric acid, ¼ ounce; simple syrup, 1 gallon; rub the acid with some of the syrup, add the extract of vanilla, and mix.

1396. **Wild Cherry Syrup.** Steep 4 ounces wild cherry bark, well bruised, in 1 pint cold water, for 36 hours; press out the infusion; let it stand till clear; decant, and add 1½ pounds fine white sugar; mix and strain.

1397. **Wild Cherry Syrup.** Moisten 5 ounces wild cherry bark, in coarse powder, with water, and let it stand for 24 hours in a close vessel. Then pack it firmly in a percolator, and pour water upon it until 1 pint of fluid is obtained. To this add 28 ounces sugar.

1398. **Strawberry Syrup.** Take fresh strawberries and inclose them in a coarse bag; press out the juice, and to each quart add 1 pint water and 6 pounds white sugar; dissolve by raising it to the boiling point, and strain; bottle and cork hot, and keep in a cool place.

1399. **Strawberry Syrup.** Take fresh strawberries, 5 quarts; white sugar, 12 pounds; water, 1 pint. Sprinkle some of the sugar over the fruit in layers, and allow the whole to stand for several hours; express the juice and strain, washing out the pulp with water; add the remainder of sugar and water, bring the fluid to the point of boiling, and then strain. This will keep for a long time.

1400. **Strawberry Syrup.** Strawberry juice, 1 pint; simple syrup, 3 pints; solution of citric acid (*see Fruit Acid*), 2 drachms; mix.

1401. **Fruit Acid** (used in some of the syrups). Citric acid, 4 ounces; water, 8 ounces.

1402. **Strawberry Syrup Without the Fruit.** Add to 1 gallon simple syrup, 2 tea-spoonfuls essence of strawberry, and ¼ ounce tartaric acid. Color with coloring made as follows: Boil 1 ounce cochineal with ½ tea-spoonful of cream of tartar. Strain.

1403. **Raspberry Syrup.** Make as directed for strawberry syrup, either with the fruit or the essence. The flavor of this syrup is improved by using 1 pint currants to 5 of raspberries.

1404. **Blackberry Syrup.** Make as directed for strawberry, and add to each quart 1 ounce of the best French brandy.

1405. **Pineapple Syrup.** Take a convenient number of pineapples, pare and mash them in a marble or porcelain mortar, with a small quantity of sugar; express the juice, and for each quart take 1½ pints water and 6 pounds fine sugar; boil the sugar and water, then add the juice; remove from the fire, and skim and strain. Or make it with the essence, as directed for strawberry. (*See No.* 1402.)

1406. **Pineapple Syrup.** Oil of pineapple, 1 drachm; tartaric acid, 1 drachm; simple syrup, 6 pints; mix. Or: Take 1 gallon expressed pineapple juice; sugar, 15 pounds; fruit acid (*see No.* 1401), 2 ounces; mix.

1407. **Wintergreen Syrup.** Oil of wintergreen, 25 drops; simple syrup, 5 pints; sufficient burnt sugar to color (*see No.* 694); mix.

1408. **Maple Syrup.** Take maple sugar, 4 pounds; water, 2 pints.

1409. **Chocolate Syrup.** Mix 8 ounces chocolate in 2 pints water, and stir thoroughly over a slow fire. Strain, and add 4 pounds white sugar.

1410. **Orange Syrup.** Take a convenient number of fresh and ripe oranges, grate off the outside yellow peel; cut the oranges and express the juice; and to each quart add 1 pint water and 6 pounds sugar, previously well mixed with the grated peel. Dissolve by gentle heat, then strain.

1411. **Pear Syrup.** Make as directed for pineapple syrup, or use the essence of pear, by adding to each gallon of simple syrup 2 tea-spoonfuls essence of pear and ¼ ounce of tartaric acid.

1412. **Apple Syrup.** Make as directed for pineapple syrup; or with the appropriate fruit essence and acid, as above.

1413. **Banana Syrup.** Make as directed for pineapple syrup; or with the appropriate fruit essence, as before directed. (*Sec No.* 1402.) Or: Take oil of banana, 2 drachms; tartaric acid, 1 drachm; simple syrup, 6 pints; mix.

1414. **Grape Syrup.** Brandy, ½ pint; spirits of lemon, ¼ ounce; tincture of red saunders, 2 ounces; simple syrup, 1 gallon. Mix.

1415. **Orgeat Syrup.** Take 3 ounces sweet almonds and ¼ ounce bitter almonds; gum-arabic in powder, ½ ounce; sugar in powder, 3 ounces. Rub together in a mortar, adding water from time to time, until the mixture measures 1 quart. Strain through a cloth, and mix with 1 gallon of simple syrup.

1416. **Imitation Orgeat Syrup.** Cream syrup, 1 pint; vanilla syrup, 1 pint; oil of bitter almonds, 4 drops. Or: About 2 drachms imitation cream syrup (*see No.* 1430) are to be mixed with 2 ounces simple syrup and flavored with bitter almond and orange-flower waters.

1417. **Orange-Flower Syrup.** Add to 1 gallon simple syrup ½ ounce extract of orange flowers.

1418. **Coffee Syrup.** Coffee, roasted, ½ pound; boiling water, 1 gallon. Enough is filtered to make ½ gallon of the infusion, to which add granulated sugar, 7 pounds.

1419. **Nectar Syrup.** Strawberry syrup, ¼ pint; Madeira wine, 1 ounce; orgeat syrup, ½ pint. Mix.

1420. **Nectar Syrup.** Vanilla syrup, 5 pints; pineapple syrup, 1 pint; strawberry, raspberry, or lemon syrup, 2 pints. Mix.

1421. **Sherbet Syrup.** Vanilla syrup, 3 pints; pineapple syrup, 1 pint; lemon syrup, 1 pint. Mix.

1422. **Ambrosia Syrup.** Raspberry syrup, 2 pints; vanilla syrup, 2 pints; Hock wine, 4 ounces. Mix.

1423. **Hock and Claret Syrup.** Hock or claret wine, 1 pint; simple syrup, 2 pints. Mix.

1424. **Solferino Syrup.** Brandy, 1 pint; simple syrup, 2 pints. Mix.

1425. **Cream Syrups.** These are prepared by mixing highly flavored syrups with fresh cream. As this latter does not keep well, it is a more economical plan to make a simple cream syrup in suitable quantities, and to add a portion of it to the flavored syrup as required. This prevents the loss of different flavored syrups by spoiling, and allows of the cream being used for any flavored syrup.

1426. **Simple Cream Syrup.** Mix together thoroughly 1 pound powdered sugar with 1 pint fresh cream. Keep it in pint bottles for use.

1427. **Taylor's Cream Syrup.** Fresh cream, ½ pint; fresh milk, ½ pint; powdered sugar, 1 pound. Mix by shaking, and keep in a cool place. The addition of a few grains of bicarbonate of soda will for some time retard souring.

1428. **Hubbell's Cream Syrup.** This is prepared with 1¼ pounds sugar to 1 pint of cream.

1429. **Cream Syrup.** Take of fresh cream, 1 pint; fresh milk, 1 pint; fine powdered sugar, 3 pounds; beat the sugar with the milk and the whites of 2 eggs, then mix with the cream. Flavor with vanilla, lemon, or strawberry. Keep in a cool place, well bottled.

1430. **Imitation Cream Syrup.** Make an emulsion with 3 fluid ounces fresh oil of sweet almonds, 2 ounces powdered gum-arabic, and 9 ounces water; then dissolve 1 pound white sugar by a gentle heat, strain, and when cool, add the whites of 2 eggs. It should be put up in small bottles, well corked, in a cool place. This is not only an excellent imitation and substitute for cream syrup, but will keep well for a considerable time.

1431. **Cream Syrup.** Take of fresh unskimmed milk, 1 pint; sugar, 2 pounds, Troy. Dissolve by shaking in a bottle, add ¼ of this to ¾ of any of the fruit syrups; or, for vanilla cream, add about a table-spoonful of fluid extract of vanilla to 1 pint.

1432. **Vanilla Cream Syrup.** Fluid extract of vanilla, 1 ounce; simple syrup, 3 pints; cream (or condensed milk), 1 pint. May be colored with carmine.

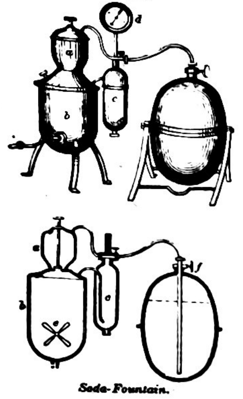
1433. **Coffee Cream Syrup.** Coffee syrup, 2 pints; Cream, 1 pint.

1434. **Nectar Cream Syrup.** This is a mixture of 3 parts vanilla syrup, 1 part pineapple syrup, 1 part lemon syrup, and 1 part simple cream syrup.

Knight's Mechanical Dictionary 1874

So'da-foun'tain. A vessel for containing soda-water or water charged with carbonic-acid gas under high pressure, and provided with pipes and valves for drawing it off as required. Soda-fountains are usually made of copper, and should be lined with silver to prevent corrosion. Steel is also employed.

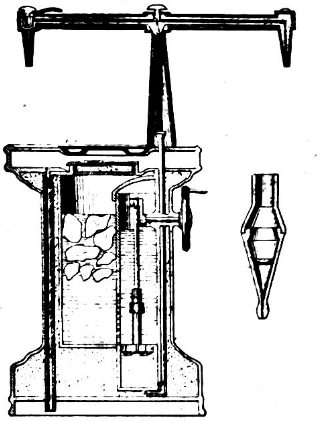
Fig. 5274.



Soda-Fountain.

Fig. 5274 illustrates a simple apparatus for generating the gas and charging the fountain. The generator a b consists of two parts communicating by a valved opening. The lower part is partially filled with chalk or other nearly pure carbonate of lime, the upper with sulphuric acid. On opening the valve by turning a small hand-wheel, the acid is brought in contact with the chalk, which it decomposes with the evolution of carbonic-acid gas; this is passed through a purifier c containing some material which will remove any deleterious matters from the gas, and provided with a gage d, which indicates the degree of pressure in the vessels. The carbonate is kept in motion by a rotary stirrer e, and when the desired pressure is attained, the cock f is opened, permitting the gas to flow into the fountain g, which has been previously partially filled with water, in which a small quantity of soda is, in some cases, dissolved. Pure water is, however, usually employed, and a flavoring sirup added when the fluid is drawn. See FOUNTAIN, Fig 2086, page 911.

Fig. 5275.

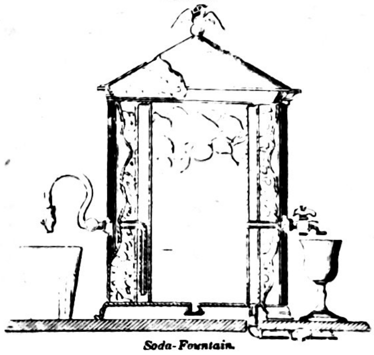


Soda-Fountain.

Fig. 5275 is a portable arrangement for village or picnic use, in which the aeration of the water is produced by the action of acid on an alkali in a chamber near the nozzle. The pump-cylinder is guarded by a perforated partition from the ice-chamber. The water is forced by a piston to the main pipe, the delivery ends of which are respectively a nozzle for plain ice-water, and a nozzle in which an effervescent powder lies upon a perforated diaphragm in the discharge-cup.

In Fig. 5276, the soda-water passes through the annular space between an ice-chamber and an outer case containing some non-conductor of heat. Discharge-faucets communicate with the soda-water reservoir and the ice-chamber. See SODA-WATER APPARATUS.

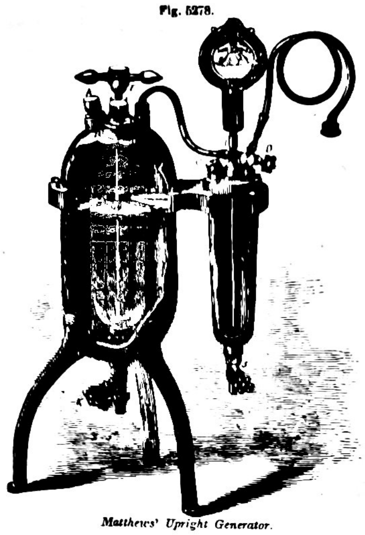
Fig. 5276.



Soda-Fountain.

So'da-wa'ter ap'pa-ra'tus. Fig. 5278 shows an upright carbonic-acid-gas generator. The acid and water are charged through the bung A, and are conducted by a pipe to below the diaphragm M, on which the marble poured through the bung B rests. On turning the handle E, a four-winged valve causes this marble to drop through slits in the diaphragm into the dilute acid beneath, where it is diffused by the agitator O on the shaft S. K is the generator discharge-valve.

Fig. 5278.

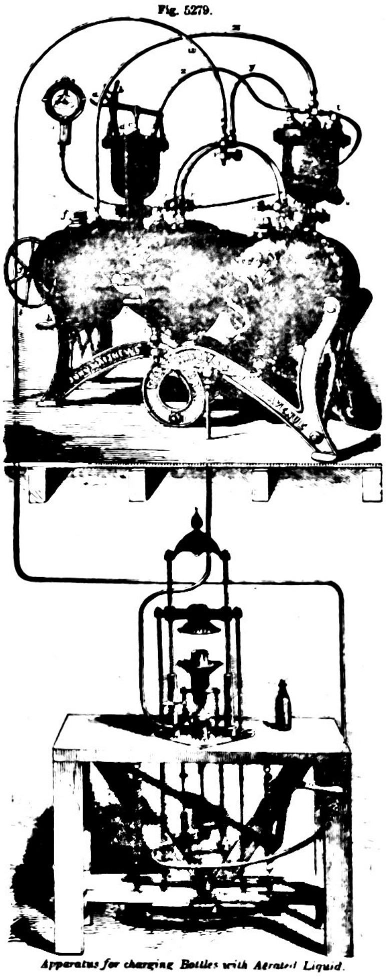


Matthews' Upright Generator.

The evolved gas passes through the pipe C into the washer R, which is charged through the bung C, and, after passing downward through the purifying liquid, is conducted to the fountain by a pipe, to which it may be admitted by the valve D.

Fig. 5279 illustrates a Matthews apparatus for aërating beverages, having a horizontal generator and two stationary fountains in connection with an apparatus for charging bottles fitted with gravitating stoppers.

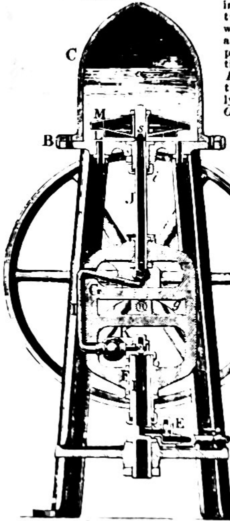
Fig. 5279.



Apparatus for charging Bottles with Aërated Liquid.

Each fountain is about two thirds filled with pure cold water through the apertures closed by the plugs k n, which are then inserted and screwed home. The gas-washer is, in like manner, about two thirds filled through the opening at t, which is then also closed. The discharge-valve c of the acid chamber is then closed by depressing the lever a, which is locked by a cam b, and sulphuric acid is poured in through a bung d. Water is poured into the generator through the bung f, and afterward marble, and the two are mingled together by turning the hand-wheel i on the agitator. The lever a is raised to open the valve c, which admits acid into the generator, and the agitator turned until the required pressure is indicated by the gage. The gas passes by the pipe a through the washer, and by turning the valve s is admitted to the middle fountain, where the agitator is set in operation by turning the handle j, thoroughly intermingling the gas and water. Then, through the medium of the stop-cock r, connection is made with the bottling-machine. This should be located at least six feet lower than the generating apparatus. The bottle is placed neck downward in the socket of the machine, and is secured by depressing a treadle. Elevating the hand-lever inserts a tube within the neck of the bottle, and, by opening a gas-valve beneath the machine, charges the bottle with gas from the top of the fountain above. The lever is then depressed, and a cock on a pipe leading from the lower part of the fountain is opened, by which the bottle is filled with aërated water. When the middle fountain is emptied, the cock s is closed and q opened, thus utilizing the remaining gas in that fountain to charge in part the end one; r and q are then closed and p opened to complete the charge directly from the generator. When the proper pressure is thus attained, the cock q is opened, permitting the gas and water to flow to the bottling apparatus as before. The bottling-machine is thus alternately put in connection with each of the fountains of the apparatus.

Fig. 5280.

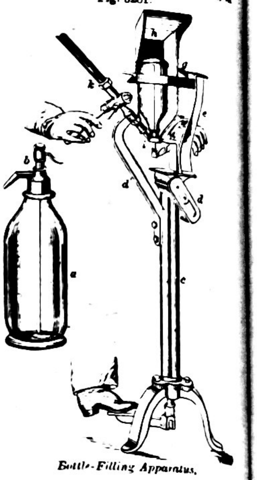


Soda-Water Apparatus.

In Matthews' improvement on the "Bramah" apparatus (Fig. 5280), water and gas are admitted to the induction-tube through two separate pipes. The working cylinder F is accurately fitted and packed around the stationary tubular plunger D, and together with the pipes I J is vertically reciprocated by a yoke G operated by the crank-shaft H of the hand-wheel. At each upward stroke, the gas and water pass through an upwardly opening valve c, into the plunger D, and at the down stroke a valve at top of the plunger lifting, they are conveyed upward through I J and discharged through a series of holes near the top of the latter, which passes through a stuffing-box in the base-plate B, and carries two disks L M, having scroll-shaped passages beneath, with their spirals arranged in reverse directions; the gas and water circulate around the lower one of these, and are conducted to the other, where, after circulating in the opposite direction, they escape through a central discharge orifice into the condenser C. This circulatory movement, together with the churning reciprocatory motion of the disks, tends to insure the complete aeration of the water. The condenser is provided with suitable outlets through the bed-plate for the attachment of a pipe leading to the bottling-apparatus and a pressure-gage or safety-valve. The pressure of gas in the condenser assists the down stroke of the pump, and there are no joints above the water-line a to be made gas-tight.

Matthews' method of making vessels for containing gases and liquids under pressure consists in forming the cylindrical body of several thicknesses of tough sheet-metal, as steel, coated with tin and united by sweating them together. This may be done by inserting several cylinders of slightly varying diameters, one within the other, or rolling a single sheet of metal into volute form, the mode of effecting the junction of the layers being in either case the same; the segmental ends are formed in like manner, and similarly united to the cylindrical body.

Fig. 5281.



Bottle-Filling Apparatus.

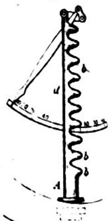
Vessels constructed on this principle are used for holding the compressed carbonic-acid gas which serves as a motor for the fish or self-propelling torpedo used in United States naval service.

Fig. 5281 is a filling-apparatus.

The bottle a has a nozzle b communicating with a tube descending nearly to the bottom of the bottle, and having a vertically moving valve, which is depressed either by a thumb-lever or by a knob at top.

The apparatus has a tubular standard c, at the top of which is an inclined guide d, carrying a sliding plate supporting the frame e, and raised by depressing a treadle. At the lower part of the frame is a shelf, having an orifice of sufficient size to receive the neck of the bottle. The upper part of the frame has two semicircular arms g, one of which is pivoted so as to swing open; the two embrace the bottle, and are secured by a catch; this arm is also provided with a shield to prevent the operator being injured by fragments, should the bottle burst. The bar d' holds the socket of the charging-pipe k, through which the aërated liquid flows. In charging, the bottle is placed in position in the frame, which is raised by depressing the treadle, bringing the nozzle b into a socket on the end of the charging-pipe; by a movement of a lever near e, the valve of the bottle is raised, and with the other hand the cock of the pipe k is opened, permitting the fluid to flow; when filled, the cock is closed, the interior pressure closing the bottle-valve. See SIPHON-FILLING APPARATUS.

Fig. 5282.



Matthews' Pressure-Gage for Soda-Water Apparatus.

Fig. 5282 is Matthews' pressure-gage for soda-water apparatus (No. 13,468, of 1855). The tube A has offsets at one side in the form of hollow plates b. By forcing steam or other fluids into the tube, the effect will be to expand or press apart the horizontal portions of the offsets b; and thus that side of the tube becomes elongated, producing a deflection of the tube, which (by connection of the upper end of the tube with an indicator) will indicate the pressure. The tube is made by electrotyping upon a core of easily fusible material, such as stearine, which is to be melted when the electrotyping has been finished. This is one of the earliest applications of metal formed by electro-deposition to a strictly mechanical purpose.

MODERN SOURCES OF SUPPLY

CAL.: GARDENA
Everfrost, Inc., 14815 S. Bdway 90247

COL.: DENVER
Grauman Co., 480 S. Holly St. 80222

MASS.: ACTON
Casson Corp., Craig Rd. at
Williamsburg Park (Steel, complete
Units, etc.) 01720

MICH.: NEW TROY
Knight, Stanley Corp., Glendora Rd.
Box 346 49119

NJ: JERSEY CITY
Grand Rapids Cabinet Co.,
56 Baldwin Ave. 07306
Phenix Soda Fountain Co., Inc.
56 Baldwin Ave. 07306

NY: EAST ROCKAWAY
Foremost Industries Inc.
2 Lawson Ave. 11518

NY: GREAT NECK
Hedeman Products Inc.,
117-119 Cuttermill Rod 11021
(516—482-8700)

NY(JAMAICA
Jamaica Fountain & Fixture Co. Inc.
94-21 Merrick Blvd. 11433

NY: NEW YORK
New York Soda Fountain Co.
1399 Park Ave. 10029
(For home & Commercial)

NY: ROCHESTER
Holderle Bros. Inc.
663 Thurston Rd. 14619

WASH: SEATTLE
Sweden Freezer Mfg Co.
3401 17th Ave. W 98119
(Automatic Fountain Systems
and Mix Supplies)

ICES AND SODA FOUNTAIN DRINKS.

A TREATISE ON THE SUBJECT
OF ICES, SUNDAES, WHOLESALE
ICE CREAM, CORDIALS AND
SODA FOUNTAIN DRINKS.

BY
P. MICHAEL

(*Index on Page 176*)

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SECTION I.—ICES AND SUNDAES.

Chapter I.—Utensils and Ingredients.

In spite of the cry that " everyone is selling ice cream," there is much to be done in the trade, especially by bakers, confectioners, restaurateurs and other owners of smart establishments.

The public is tired of the street barrow ice cream, and " Jack " is gradually fading away, thanks to his unwilling children, who prefer not to follow in his footsteps, policemen controlling traffic, and the ever-increasing fastidiousness of the public, *who are buying more and better*.

American ice cream parlours are springing up, admitted, but it will take some time before they are in the majority. Smart shops, mentioned above, have their chance for three-fourths of the sales of ice cream.

It is not a troublesome trade—in fact, it is less troublesome than many others—and it is time that the old cry of " always having it left when it rains " were discarded altogether. A very wet summer is, admittedly, a source of trouble, but such may be regarded as an exception, which does not affect the smaller people to the same extent as it does the wholesale factories.

If ice cream has been sold in your district or not, if the local population have heard of it or not, sell it. The last few years have shown what can be done by booming a product continuously and well. To every person who sold ice cream in 1918 there are now four, and many a new wholesale factory has sprung up and is being erected for the coming season, for the simple reason that people are buying more and more.

The trade here is emerging from its elementary stages, as it did about twenty years ago in the States. Quality and quantity have increased year by year over there until the annual sale of ice cream in shops alone (not counting the huge quantity that is made with home freezers, so common over there), is 300,000,000 gallons, and the milk fat percentage is 10.

Readers will say: " Yes, but they use cream over there The Government helps to boom the trade. Everyone eats ice cream every few hours," and so on. The only answer is: They had to start; so must we, if we want the profits they get. Each must cultivate his own clientèle to buy more day after day; to look upon it as a good, nourishing food, good in winter as well as summer, better and cheaper than many other foods; dainty, but valuable; delicious, but body-heating; flavoured, but full of vitamines.

That is the way to build up a trade—and a good bank balance.

To the novice I would say: Look around your town and immediate neighbourhood and make up your mind as to how you'll plunge into the trade. You can purchase your ice cream wholesale, make your own for retail, or make it wholesale.

In the first instance, you are sure, or as near as possible so, of getting the quantity you want, when you want it, of a good product, something that others are selling (probably with success), and without the necessity of purchasing freezers, tubs, utensils, daily deliveries of ice, and so on. In the second, you have the chance of making your own quality, just as you think your customers would like it; can guarantee it is made on the premises under your own supervision; can experiment every now and then with ingredients; freeze another lot when you think you are " selling out " without waiting for the delivery from the wholesale factory, and so on.

In the third you have the chance of scooping up the wholesale distribution in your town and earning money from what the other retailers sell, as well as your own. This is not an Utopian dream; it is an actual fact in England, Scotland and other countries, as well as the States, although, so far, there is no danger of any factory over here assuming in the next few years the huge dimensions experienced in America. It is nothing for a firm over there to have twenty or thirty large freezers, hundreds of packing tubs and containers (" container " is a better word than freezer, especially if it is used to contain the ice cream and not freeze it), tons of ice and salt in daily use, and a huge fleet of delivery motors, distributing the goods in all the districts within a radius of fifty or a hundred miles.

But it won't be many years before we have something similar over here. A good start has been made, and there are plenty of imitators ready, some still studying the trade in the States and some actually over here.

Leaving each trader to settle his own choice, it will be best to deal with ice cream from the point of view of the small retail manufacturer—the one who just wants to make his own every day.

All he wants is a few pounds spent in a freezer or two, a few utensils—plates, spoons, etc.—a very clean outlook on the trade, and the public does the rest: It always finds money to spend on something attractive. Can you deny it? Commerce is increasing on attractiveness more than on anything else. Look at the large stores and shop windows; the better display of goods is the magnet that draws pounds from pockets whence once only shillings could be got.

The average baker's or confectioner's shop is ideal for retail ices. The clean environment, the display of bread, pastries, cakes, sweets, the neatly dressed assistants, are just the things wanted—the things that were missing in the past, when the ice cream trade had the chance of attracting the adult public, but—didn't! A few tables and chairs, a section of the counter displaying clean plates (old-fashioned glasses are second best), a Disher spoon (which I will describe later on), a few bottles of fruit syrups (if you think your clients would like extra flavours on their ice cream), a few tinned fruits in dishes (if you also intend to go in for better priced ices), and the rest is easy.

To start from the very beginning, you want to be sure that the factory, cellar or room in which you will boil, cool and freeze your ices is perfectly sanitary. England is very lax in some things, and the unprincipled trader has every opportunity of inflicting the public with anything under the name of ice cream. But there is one good point, and that is that there must not be any drain or similar contrivance in a place where ice cream is made (boiled, cooled or frozen), and, more or less, the sanitary authorities have to " pass " it first and visit it about twice a year.

A certificate can be obtained stating that the place is fit for the manufacture of ice cream, and, also, that when last visited the premises were clean, etc. It is not a very bad idea (some call it playing to the gallery) to frame the last

certificate received, and let your customers see it. After all is said and done, if you deserve the certificate, others there are who do not, so be proud of it and expose it. Incidentally, it will teach the public to discriminate between clean traders and the other type. It won't be very long before the latter will disappear altogether, but while they remain fight them with cleanliness until they are poisoned out of the trade.

If you are thinking of putting aside a room or erecting a small factory, remember that the following are the ideal points: it should be clean from top to bottom, lined with tiles or painted and varnished or limewashed every few months, waterproof floored (concrete, if possible, and with a slight slant towards the door or other part, where water can run out towards the yard or drain), well lighted, well ventilated and clean smelling.

As a rule, the fire or gas fire for boiling is not in the same room as the freezer and ice-box, but there is no harm, provided the room is large and plenty of distance separating one from the other, in having the fire, the shelves for storing the cooling " mix " (unfrozen ice cream) and other ingredients, the freezers, ice and salt-boxes, tubs, etc., all in the one factory or room. The only troubles experienced in a small room are: heat interfering with the cooling and freezing, and colds and rheumatism overtaking the workers.

Having been warned, you will prepare for your first " batch " as you think best.

Making a Batch.

To make the average English or Italian ice cream (which is really a milk ice, being made from milk and not cream) you require for a small shop: 4 quarts fresh milk, 1½ lbs. sugar, 8 ozs. Scotch cornflour, at least 6 eggs, and a few drops of vanilla flavouring. There are many variations of making this ice cream, but I am keeping to the ingredients a baker or confectioner generally uses, and, strange to say, that are not only the handiest, but practically the best. One could say, for instance, that gelatine or gum tragacanth is better than cornflour; that vanilla pods, boiled in the milk, are better than vanilla essence, etc.; but these are mere pedantisms that only concern the wholesale manufacturers, in ninety-nine cases out of a hundred. Besides, gelatine and gum have no alimentary value, whereas cornflour has about 1,600 calories to the lb., and I would advise you to keep to those ingredients that have food values, as the future of ice cream rests on these. The fortunes made in the States from ice cream would not have been possible had the public not been attracted by food values. The above recipe will give 3·3 per cent. fat, 7 per cent. serum solid, and 29 per cent. total solids—not a bad food at all.

It is advisable to add a pinch of salt to every gallon of milk or cream used in the trade.

Now for the boiling. This is still the best way to agglomerate the ingredients before freezing when dealing with small quantities. The much-mentioned factories have dispensed with boiling altogether; in fact, they state that it spoils some of the constituent parts of the milk. We won't go into that yet, but will see to the boiling.

If you can't get a 2-gallon " jacket," or double boiler (which would be the best of all), get a 2-gallon copper saucepan, well tinned at the bottom, round or oval shaped. With the former you run no risk of scorching and spoiling the " mix," no matter how long you leave it on the fire or gas. There are two points always worth remembering when boiling milk in a saucepan: rinse the saucepan or boiler with water before pouring milk in, and see that the contents do not spoil by scorching. To prevent the latter many ways are sought, the usual one being to rub gently the bottom with a whisk or wooden spatula all the time. When boiling large amounts there will be less strain in using the spatula if a few holes are bored through its bottom or widest part to allow the milk to flow through it, thus reducing the strain.

The milk is poured in first, then the sugar evenly over the bottom, stirring occasionally. While the contents get heated, place the cornflour in a bowl and whisk it with a little of the milk from the saucepan until it is an even mass, liquid, smooth and without any lumps. Remember that it has been known in the trade for a customer to find a small " ball " of cornflour in his ice and even in his mouth, and not one out of a hundred can be pacified with a lecture on its food value. Taken generally, the public does not like the idea of flour in its ice cream, so the only thing to do is to whisk it up thoroughly before pouring it into the saucepan. Remember to stir the whole contents as much as possible, and do all that is possible to prevent scorching

Break the eggs in a cup one by one, and do not turn an egg from the cup to another bowl until you have made sure that it is fresh. Confectioners do not require lectures, as a rule, on the effects of a bad or musty egg, but I would impress on them the fact that ice cream goes by flavour even more than the other goods they make and sell. Besides, fresh eggs whip up better, and bring you in more profit in the long run.

Whip the eggs up to a froth, and keep them by for the time that the boiling " mix " has to be poured on them. Many a recipe-monger has advised adding the eggs to the saucepan, stating that the cornflour prevents curdling, and that an even better flavour will thus be obtained. I advise not boiling the eggs until you have mastered a good ice cream; if you want to experiment with any other way afterwards, do so by all means.

For the quantities mentioned above half of a vanilla pod or stick is sufficient, or its equivalent in liquid or crystal vanilla. You probably have the latter, and will no doubt use it according to instructions or experience; but the pod must be split from top to bottom and boiled with the " mix " if you want to extract all the flavour. Do not leave vanilla uncovered, but keep it well stoppered in a glass jar. Many steep it in alcohol and sugar, but it is far more important to keep it as hermetic as possible.

You have now the milk, sugar, cornflour and vanilla pod nearly boiling. Keep stirring slowly, but evenly, making sure that *every part* of the bottom is rubbed or scraped gently to prevent spoiling by scorching. Keep at it patiently, remembering that all the so-called goodness of the ice cream is brought out by careful mingling and boiling. As soon as the " steaming " (prior to boiling) appears, have everything in readiness to lower the gas or reduce the heat of the fire, so that nothing boils over. Generally, a shovelful of small coke is used, or a sheet of iron placed half-way across the top of the fire, and the saucepan placed half on and half off the sheet.

Keep stirring until it actually boils, then lift the saucepan bodily off the fire (the extra capacity of the saucepan prevents boiling over), and let it simmer for about fifteen minutes with less heat. Let the whole mix cook properly and thoroughly and acquire that homogeneous flavour that means everything to the customer—and to your sales.

Place the whipped eggs at the bottom of a clean enamel pail, and pour the boiling " mix " through a strainer on to them. Cheese cloths are generally used, as are meat cloths, or a thin-meshed wire strainer. Keep them scrupulously clean. Some pour a little cold milk on the eggs first.

Stir the contents of the pail from top to bottom, cover with a clean thin cloth to prevent dust falling in, but so as to allow the air to get to it, and rest on a shelf to cool.

If you have not used a vanilla pod, the liquid vanilla is to be added after boiling, and generally just before freezing, to save evaporation.

It is the custom in the trade to boil the " mix " in the morning, and allow it to cool naturally till frozen the next morning. In case of emergency, the pail can be placed in a tub or bath containing running water or ice water (care should be taken that none of the water gets into the pail), and the " mix " whipped up until it has cooled evenly. Some rest the pail in another and larger one, packing the space between with small lumps of ice. But none of these methods is to be recommended where natural, slow cooling is possible. Having washed, scrubbed, and dried every utensil used so far, place them in their usual places, and get everything ready for the freezing.

Ice and Salt.

Make sure that you have a fit and proper freezing-room, hygienic, sanitary, with as little dampness as possible, well ventilated, full of light, with no cold draughts likely to " cut across " you or your employees while perspiring in it. The flooring should be concrete, if possible, without cracks, holes, bumps, or any other troublesome thing. Experience teaches that there should be a slight dipping towards the door or centre, so that the water from ice, freezers, pails and taps can run off without causing a lake or a sloshy floor. No one needs telling that clogs should *always* be worn when freezing. No lavatory, drain or similar opening can be allowed where ice cream is made, neither can any of these communicate with an ice cream factory, but should be walled off. Later on I hope to give descriptions of American factories, all white tiles, rounded corners to prevent dirt accumulating, fly screens across all windows to prevent contamination from fly dirt, etc; then you will understand.

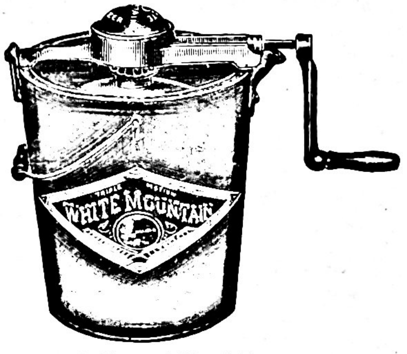
Ice should be purchased in blocks. For a small quantity such as we are now dealing with about ½ cwt. is sufficient, and the best way to keep it until used is in a large, low box, something like the bottom half of a Tate sugar box, with a hole in a corner to allow the melting surface to drain off or plenty of sawdust at the bottom of the box. Sacks should cover the ice, top and all sides, to prevent loss by melting. Most users of ice forget that the temperature of ice is 32 degs. Fahr., whereas that of the room is anything from 60 degs. upwards; therefore melting must happen to the ice. Sacks and other thick cloths save a good bit of it.

If you become a large user of ice it will pay you to have an ice safe built, either in the form of a large box or else—and this would be preferable—by walling in a corner of the room. The best ice safe I ever saw in a medium-sized Italian factory was a double-walled wooden affair, with sawdust heavily packed between the two walls, a concrete floor, slightly dipping towards the centre of the factory, and a thick, heavy door, padded at the sides with sacking. This prevented any warm air getting in, finding its way through the many sacks that covered the ice and melting it. There was a small hole at the lowest side of the box, from which came out the " liquid ice," thus preventing the melting of the bottom surface of the blocks of ice. All these losses tell in the long run.

Another box will be required for the freezing salt, although this gives much less trouble than the ice. Large users can have a box built in another corner to allow fresh deliveries to be shot in at the top through a removable lid or cover, while the older salt is taken with a shovel through a trap-door near the floor. Salt should not be allowed to get wet, otherwise you will lose the " crispness " ice cream makers stand by a lot, as they do with ice.

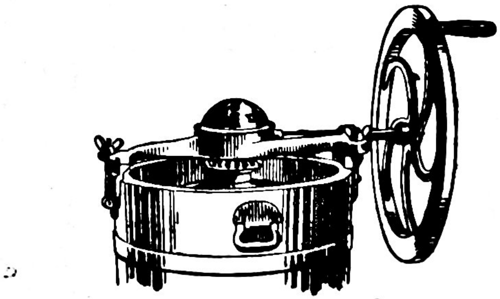
Freezers.

There are so many freezers on the market that it is hardly necessary to mention them. The best makes are those that whip up the ice cream most, the so-called " triple-action." By turning the handle the freezer goes round to the left (or right), the two side knives or scrapers in the opposite direction, and the centre scrapers (known as the fish-bone dasher) in the opposite direction to the side scrapers. These movements result in the smoothest possible ice cream with the least possible time, unknown and unbelievable in the old days of hand freezers, although, in all justice to the pioneers of our trade, it should be said that some of these turned out a smooth ice cream, palatable as well as pure. But what an agonising time was spent twirling the freezer round, scraping the sides from time to time with the zinc spatula, and then, when the mass assumed a thickish consistency, beating and scraping with the smooth wooden spatula, with hands thick with perspiration mixed with lumps of ice cream! What took them from one and a half to two hours to do is now done in twenty or thirty minutes.



A Type of Hand Freezer.

A small hand freezer, capacity 8 or 10 quarts, is the smallest size you can use for the quantities mentioned. Purchase an absolutely new one, fresh from the makers or importers, with the inside of the container that has to hold your ice cream heavily tinned. If you are going to have a special " show " freezer for the shop, it will pay you to have one of enamel (paying attention to any possible danger of cracking it, otherwise the salt water will get in from the tub and you stand to lose money and customers), pewter or zinc. There is a lot of unnecessary controversy over zinc freezers; there is *no* danger if used as directed. One would imagine, to listen to some of the far-fetched arguments, that a wicked little boy in the family does nothing else but scrape the zinc with a knife and lets the scrapings get into the ice cream. This does not happen with the small machines, as the side scrapers are made of wood, and wear out (i.e., have to be re-edged) before any part of the zinc could scrape off.



Another Type of Hand Freezer.

The invention of the power freezer has been the greatest boon to the trade. Different from the heavy factory freezers—cumbersome, with cogs-wheels and lids—the power freezer allows one to do all the freezing on the very spot where the ice cream is to be sold. It is just a tub and a container resting on a spindle, that is connected with a worm drive to a pulley on the outside. The electric motor or gas engine is connected with a belt to this pulley and does all the work. As a rule, there are two wooden or zinc side scrapers in the freezer, and these are sufficient to scrape the hardening ice cream from the sides and turn it towards the centre continuously, thus ensuring the " whirl " that is required to incorporate air in the ice cream and give it that light and smooth flavour. As these freezers are made from 3 gallons upwards, it would pay the trader to consider purchasing one of these instead of a hand freezer. If you do not want to fix it in the counter and have to fix the motor near it, or in the cellar or on the ceiling, you can instal the freezer in the factory and just fill another freezer with ice cream from it and take it into the shop. Experience teaches that it is preferable to pack up the ice cream in the *same* freezer in which it has been made, thus saving that slight melting of the surface of each scoopful or cupful that is taken from one to another. It is this melting that causes that icy taste in the customer's mouth, the particles of water in the milk being highly responsive to temperature changes. Hence the great success of the power freezers, the only so-called trouble being the bringing of ice and salt into the counter, and some system of letting the water drain from the tub when the ice has melted. Some have a hole bored near the bottom; others use a rubber hose from the top—a very tricky operation, that tastes rather salty when one is inexperienced. The average Italian trader in Scotland finds no danger in it, however.

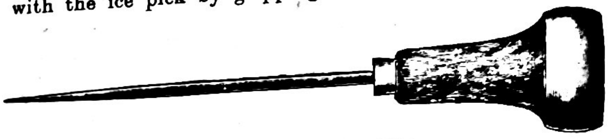
Freezing.

Let us suppose that the trader is now getting ready for his first " freeze." He has rinsed out with fresh, running water the container (if it is a new one it should be well scrubbed with salt and water and washed out *repeatedly*) and dried it with a clean cloth and placed it in the centre of the tub. If it is a hand machine it should rest on its spindle, otherwise you will experience all sorts of inconvenience later on. The old " Italian " or hand freezer is placed in the centre of the tub. Some place a smooth sheet of iron or zinc at the bottom to prevent the freezer wearing its way into the wood.

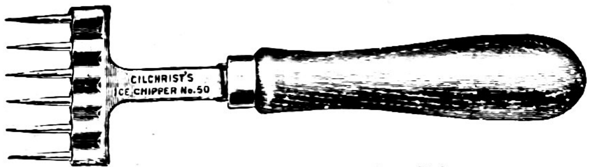
The " mix " is then poured into the container. If it has been kept well covered there is hardly any necessity to strain it again, but whenever you have to deal with ice cream, especially with an eye to building up a large clientèle for it, remember that it is better to overdo the straining than to underdo it. Customers forgive many things and remain your friends; they never forget foreign substances in your ice cream; in fact, they go to your competitor at once and let him know about it. Put the lid on the container *at once* and keep it there as much as possible—i.e., excepting when dealing with the contents.

Before breaking up the ice you require, get three pails ready, nice and clean—one for resting spoons, spatulas, etc., another for catching the drippings from freezers, bowls, etc, and another (two-thirds filled with clean water) for washing your hands. Neglect everything else if you must, but do not neglect the pails.

Uncover the ice in the ice box, break off about 28 lbs. with the ice pick by gripping firmly with the hand and making quick, light incisions in the block without letting the point sink too deeply into it in case it breaks off. Place the portion you want in another box, and cover over the the rest again. Break your ice with the ice pick in small pieces about the size of large walnuts and *not* into large lumps, as probably you have seen in large factories. It stands to reason that if ice cream is frozen by brine (salty ice water) the ice must be allowed to melt quickly; therefore large lumps are wrong. Another point connected with this is the fact that the more the sides of the container are packed with a freezing mixture (ice and salt) the quicker the freezing. Large lumps of ice allow air to get in between them and retard the freezing.



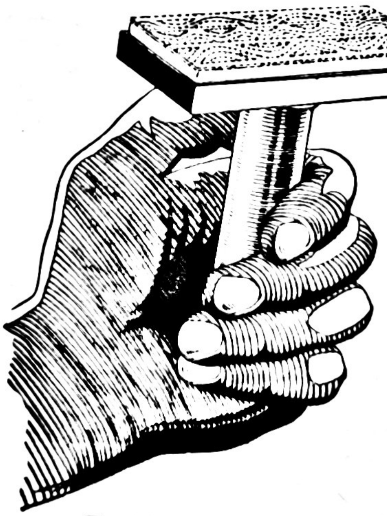
A " Gilchrist " Ice Pick.



" Gilchrist " Needle Point Ice Chipper.

When you have broken up the ice into small bits, pour one shovelful slowly into the bottom of the tub as level as you can round the container. Over this amount of ice you want at least one cupful of freezing salt. Not everyone agrees on the right proportion of salt to use. Some say one to ten of ice; some say that it should be reckoned in bulk and not in weight, and that one to five is better, and so on. In America, where calculations on the trade go on for ever, it was found that in freezing in a large factory 19 lbs. of ice were used to the gallon and 2 lbs. of salt. But even then these figures were for the *brine* system of freezing cream; we do not use cream and have no brine pump, but just use the ice and salt.

To continue, pack the ice and salt in layers round the container until the top layer of salt is a few inches higher than the ice cream inside, then cover the rest of the ice with a sack. This extra amount is required, for the simple reason that it will soon melt into brine and drop down in height. Remember that the whole " side " of the ice cream must be frozen, and you want a larger container than at first appears necessary, as you do a larger saucepan for boiling milk.



The " Segic " Wafer Server.

Wash your hands in clean water and dry them; this will prevent the superfluous wet and moisture that is the curse of ice cream factories, and often spoils ice cream

If you have a hand freezer, start twirling the container round with the handle on the lid, taking care not to jerk it left or right; otherwise you stand the chance of making a hole in it with one of the pieces of ice. This is probably the most usual accident in the ice cream trade and the cause of much loss of money, time and patience. Another way is to take off the lid and twirl the container round with the thumb and finger of each hand. This will be found a bit "stiff" at first, but as the ice starts melting it will get easier. Subsequent freezings are made easier by always leaving an inch or two of the previous day's brine at the bottom of the tub.

With a hand machine one has simply to fix the lid on the container, the cross-bar and handle on the lid, and the rest is easy. The action of the handle being turned scrapes and beats the ice cream to perfection, just as a power freezer would. Little by little the ice (*i.e.*, the freezing mixture) drops in temperature from 32 degs to 20, 15, 5 degs., and even lower, according to the amount of salt used, thus making the sides of the container colder. If the ice cream were not scraped away a mass would form all around the sides and freeze hard, leaving the centre mass cold, but "sloshy," and the beauty of a power or hand freezer, as distinct from the old hand machine which Italians always used, is that of the continuous scraping and pushing towards the centre, causing the centre mass to come towards the sides. It is this action that produces the evenly frozen and smooth ice cream.

Gradually the turning gets harder, and you notice that the ice has practically melted into water, cold and not too transparent. Quickly place some more ice and salt into the tub, taking care that it does not reach high enough to work its way into the freezer. The usual way is to let off a little of the brine from the bottom hole, or else leave the top hole (about 1 in. from the top of the container) uncorked, and add more ice and salt. In a usual "freeze," lasting about 15 mins., it is not absolutely necessary to add same, however; it can be left for the "packing up" for the rest of the day, when all the brine, excepting about 1 in., is let out, and the tub quickly filled with ice (not too small this time) and salt, packed down tightly with sacks and a wooden lid and taken into the counter.

Let us go back a little to the freezing. The harder it gets the more attention you should pay to it. Do not do what many novices or lazy persons do—i.e., leave it there and then. It is just at this point, when the contents are at about 28 degs., that they will whip up more air, become smooth instead of icy and grainy, and increase in volume. All this means profit to you! So do not be afraid of sticking at the handle and turning it round until it becomes unpleasant or too stiff. Take care not to force any parts of the freezer; the makers generally supply at a small charge two small rods, that are screwed to the floor or table or box and the tub placed between them and connected with screws or clips. This saves the tub moving or slipping about while the heavier turning is being done, and gives you the opportunity of finishing the freezing to perfection. Of course, a power freezer, being firmly screwed to the floor or ground, saves you this extra attention, and turns out the ice cream as it should be—i.e., hard, firm, evenly smooth and "heavy." This last word needs explaining; heavy, inasmuch that it is not watery and soft, but not heavy as in the case of unfrozen ice cream containing no air. The consistency should be that of putty.

The ice cream is now frozen, and nothing else should be done to it excepting levelling down in the container with a silver or non-tasting utensil, such as a trowel, broad knife (blunt) or tablespoon, after all possible care has been taken to prevent any salt from the lid—or any salty water, come to that—from dripping into the container. Plenty of water to wash your hands and a clean towel save a lot of trouble and expense. Remember that it only takes a few pieces of salt to spoil the whole contents of the container, and that means a bad reputation for your ices and a double struggle to work up a good connection for them.

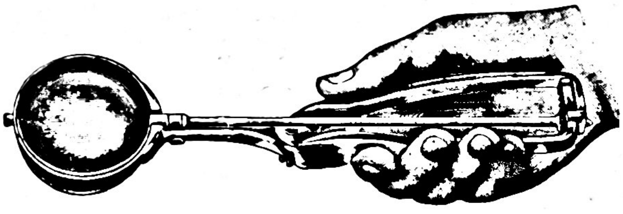
The centre and side beaters should be gently lifted and carefully scraped (letting the ice cream drop into the container), and can then be rested in the pail placed there for that purpose. The spoon or other utensil goes with them. But as soon as the dripping process is finished, wash them under the tap to get rid of the sticky covering, scrub them in plain hot water, rinse under the tap again, and dry carefully. Then put them away from damp or wet, preferably in a clean cloth, so that they do not get rusty. Remember that rust is a crime in foodstuffs, besides ruining your utensils by gradually eating into them.

The lid crank and handle should be cleaned over with a damp cloth, and then with a dry one, and replaced on a shelf, taking care, of course, that they do not drop off and break.

The ice cream, as left frozen, will remain hard for a few hours, and no "packing" is required. But if the freezing is done, say, at 9 a.m., and the ices have to last till the evening, one must let out the brine and pack, as stated, with more ice and salt, pressing all down with a stick or iron rod without damaging the sides of the freezer. Cover the top of the ice with a heavy cloth, or sack rolled into a strip and press this down with the stick. Over the tub place the wooden lid, over the container the zinc or tin lid, and carry the tub to the counter. It is usual to strew sawdust on the floor where the possible leaking of the tub may make a mess, and to place the tub on a box or small trolley, so that it comes to the level of the counter. It certainly looks bad to be seen digging from the depths of a counter to serve up a dish of ice cream; nine persons out of ten imagine all sorts of lumber and dirt behind a counter. No wonder ice cream served from an American cabinet or from a marble soda fountain sells more! Another good stunt is to have a clean white serviette or shop towel over the ice cream instead of the prosaic-looking tin lid; it attracts more. Always keep the inside of the freezer clean and dry.

How to Serve.

Now as to serving ices. Little by little the old-time glass is disappearing, and there should be no regrets. The great majority always connected these glasses with the "dip and lick" method of the old-fashioned ice cream "Jack," who, especially in a rush, gave far from a wash and a polish to these glasses. The reigning custom is to serve the ice cream on a glass, china, or "silver" saucer or dish, either flat or eggcup-shaped. The latter are known as "sundae cups," sundae being a novel American word for ice cream and fruits, the great "rush" over there. And the best way of serving ices thus is to use a "disher" or measure spoon that is easily described. The handle is either of wood or of a double-plated brass rod. By turning a little clip near the wooden handle, or by squeezing the "grip" handle, a rod running from the handle to the "cup" turns round and operates a circular cutter or knife in the cup. In action, you dip the disher into the ice cream, preferably near the side, scrape the superfluous ice cream from the cup by passing it across the top of the container, hold the cup over the saucer, plate or sundae cup, squeeze the handle or touch the clip, and the ice cream falls on the plate in the shape of a smooth ball flattened at the bottom. It is really a half-ball, and is certainly the most attractive shape one could wish for, whether served plain, or with syrups, fruits, or in ice cream drinks. How awkward were the many shapes (save the word!) in the past! And what a time went in mastering the trick of serving ices in the old glasses until a little looked a lot! The trick was in the curved "topper-up," raised at one side of the glass, thick at bottom or top, but less than one-sixteenth of an inch thick in the centre parts!

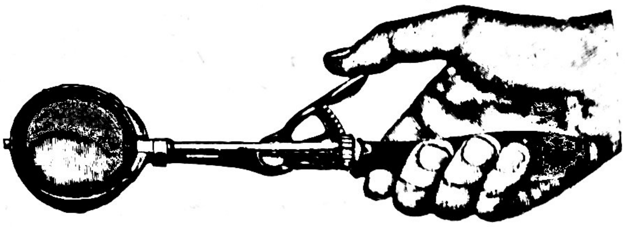


The "Gilchrist" Automatic Ice Cream Disher, Grip Pattern.

To see the beauty of ices served with a disher one has to go to a busy American soda fountain and see the assistants serving them up with astonishing speed and dexterity. And there one can admire the saving of space obtained by using plates piled on each other instead of the old glasses. And plates, again, can be had of any attractive colour, if one does not want just plain glass ones. The shell-shaped opal ones are very attractive indeed. But I would warn traders against those with fluted or crinkly designs; these get filled with black "lines" or streaks very quickly, and nothing less than a brush, hot soda water and soap can keep them presentable. Can you work up a good ice cream trade on black lines?

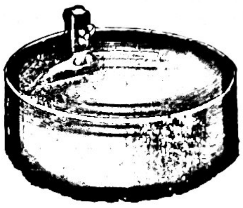
The disher should be kept in an attractive utensil, such as a "silver" jug, with water (renewed occasionally) up to the whole of the "cup." Do not let the water rust the spring or rod; it is unnecessary and foolish.

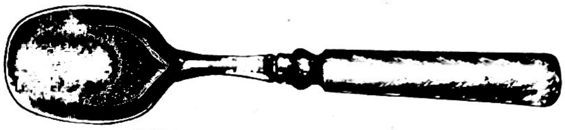
You should see that whoever serves ices in your shop does so artistically and gracefully. There are many touches in serving customers that once were deemed silly and useless, but are now recognised as conducive to a better "environment" in a shop, especially where the comfort of clients is to be studied. For instance, instead of placing the saucer on the counter and dropping the ice on to it, hold the saucer on the left hand, gracefully, without letting the fingers touch it, scoop up the ice cream, and with a graceful sweep of the right hand bring it about one inch higher than the saucer, turn the rod with a quick movement of wrist or finger, and let the ice cream drop quickly and evenly in the centre of the saucer. The times I have seen the assistant messing about with the disher, tugging away at the handle or clip, assuming a worried and impatient look (generally because the machine was not kept in clean water), and finally dropping the obstinate ice cream on the floor! And all this kind of thing in a food shop looks bad, and is unforgivable.


The "Gilchrist" Disher, Operated by Means of Thumb-piece.

Another thing I have seen is an ungainly assistant ("all one lump," as we sometimes call them) shaking the whole place down while passing a cloth over the counter, knocking against glasses and saucers, and finally causing some of the crumbs and some unedible matter to fall into the uncovered freezer. Very awkward, if you have fastidious customers in the shop at the time! And, believe me, all customers should be fastidious where ice cream and their health are concerned; it would be better in the long run for traders who take care of their wares and are worthy of the name of ice cream manufacturers.

Tables and chairs are a necessity for the sale of ice cream. There are some beautiful designs now in both, from the wicker "seaside" style to the glass-topped fashion. Some have a doyley under the glass; some traders slip a menu on to the centre of the doyley. All this looks novel and attracts. Be careful with spoons, remembering that in the old days not only children, but even adults, preferred to lick the ice cream from glasses. Do you know why? Because the cheap, penny-per-dozen lead or tinned spoons that were used then gave a very unattractive metallic taste to the ice cream and put the customer off it if he saw no way in licking the ice from the glass. Silver is always the best metal for spoons, but being very costly, and inclined to disappear in most neighbourhoods, nickel-plated spoons, of an attractive design, are mostly used. Care should always be taken to have the spoons perfectly clean and highly polished. Nothing is better than hot soda water for the first wash, fresh water for the second wash, and a clean, dry towel for the final polish. Have the spoons in a nickel-plated spoon jar, as used at all American soda fountains.


Ice Cream Disher Scraper.


"Gilchrist" Ice Cream Spoons.

The Ice Cream Counter.

The whole of the ice cream counter should be attractive, and as near in appearances to a soda counter as possible. If you cannot have a marble top, cover the wood with a cloth that gives the appearance of marble. Incidentally, this will save breakages while your assistant is learning the trade. Have all the mirrors of the back bar polished every morning, and the bottles, jars, etc., scrupulously clean. Fruits, syrups, marshmallow or any other ingredient that go in the making of ice cream dishes should never be overmade and left over if possible. Try to make just enough for one day, so that there is none left over to look anything but fresh and attractive, and, in hot weather, to go off. This never attracts customers and never adds to your sales; in fact, it is just these little points that make or unmake a business, especially when you are just starting to attract people to something that until a few years ago had a bad name in the majority of cases. As soon as a tin of fruit is opened it should be turned out into a clean glass display bowl, and the tin then removed from the shop. The bowl itself should not be kept near anything warm, such as a tea-urn, but somewhere cool. Ladles or spoons used in serving the fruit should be nickled and long enough to have the handle always dry and clean. Nothing is more nauseating that to see an assistant grab hold of a sticky handle in a food shop. Never let used saucers, spoons, etc., remain on the tables when the customers are no longer at them. It is an old trick in slack restaurants to leave (and actually place!) used plates, glasses, etc., on the tables to give an impression of being busy, as if to say, "Others patronise us; won't you come in?" But nothing of this will ever build you up a clientèle for ice cream, so take them away as soon as the customer goes out. Never allow a second ice to be served in the same glass unless the customer insists on having the same glass, which is very unlikely, and is often done with the feeling of saving the assistant the work of washing two glasses instead of one. I have known juvenile customers to do so, but always regarded them as being out for every drop of ice cream possible, and likely to grow up into the sort of customers that ask a post office assistant for a Christmas box.

It is no exaggeration to say that the ice cream trade started with kings and other aristocrats who alone could afford the special chef, dwindled down to the gutter (in more ways than one), and is now finding its proper level in cafés, confectioner's and baker's, patronised by the public for other attractive and nutritious foods. In my opinion the bulk of the sales of ice cream in the future will be made in these shops, so start the right way to get your share of it.

Advertise it left and right in local newspapers, magazines, cinemas and theatres, club and society programmes and posters, on attractive circulars, special trade cards with a small, true-to-life colour illustration of a glass of ice cream, with syrups or fruits (as advertised successfully in America), invitations to increase the attraction of bazaars, concerts, picnics, at-homes, etc., with your special ices made in an ideal factory, with all possible attention, finest quality cream and milk, untouched by hand, special machinery, and so on. Offer some to the local hospital or church bazaar, give an occasional glass to customers purchasing other goods, send a carton containing a half-pint or more to the local celebrities. It seems money wasted at first, but it comes back a hundred fold later; and all advertising is like that; it is laying the foundations for the building.

Chapter II. Cream, Milk and Water Ices.

Having tackled the best-known recipe for ice cream, as known in Britain, and already stated to be a milk ice, we will now go through a few more of the same nature before discussing cream ices and water ices, although some may clamour for one of each at once, knowing that it is becoming more and more general to have at least two kinds of ices in the shop.

A cheaper Italian ice cream than the one recently discussed is made with:—

3 qts. milk.
1 qt. water.
1 lb. sugar.
8 ozs. cornflour.
Egg flavouring and colour
(Annatto, cochineal, etc.)
Vanilla flavour.

A cheaper kind still, gradually becoming extensively used, is made with:—

2 qts. milk.
2 qts. water.
¾ lb. sugar.
6 ozs. cornflour.
1 lb. marshmallow.
Vanilla flavour.

The latter is an imitation of the American cream ice flavour, which is the ice cream of the future in Britain. In fact, no one can deny that little by little the trade here is getting into the right stride and is slowly but surely assuming great dimensions. What is wanted is a "Government recipe"—*i.e.*, a law that will regulate ingredients and factories and gradually get the public to believe in ices, get used to a certain flavour, and become regular customers. While the trade is criss-cross in varieties and flavours, as it is now, much effort is wasted; and, taken all round, the consumption of ice cream is still relatively low, even in summer.

A dearer and better ice cream is made, naturally, with more costly ingredients. For instance:—

2 qts. cream.
2 qts. milk.
1½ lb. sugar.
8 ozs. cornflour.
12 to 20 eggs.
Vanilla flavour.

This contains 14 per cent. fat, 6 per cent. serum solids, and 35 per cent. total solids.

A real American cream ice would be made thus:

3 qts. cream.
1 qt. milk.
1½ lb. sugar.
½ oz. gelatine.
Vanilla flavour.

Sheet gelatine is the best, and should be left overnight in water to soak, then dissolved in a little hot water and added to the warm mix.

A well-known method to improve the flavour, smoothness and fat content of a milk ice is to add a lump of butter *after* the boiling is done, and whisk it up until perfectly dissolved.

Other American recipes, changing with the butter fat content desired, are the following, all of which are over the 10 per cent. fat, considered the lowest that would be called ice cream at all in most States:—

18 per cent fat.
2 quarts heavy cream.
2 quarts milk.
1½ lbs. sugar.
½ oz. gelatine.
Vanilla flavour.

14 per cent. fat.
5 pints heavy cream.
1½ pints milk.
1 pint condensed milk.
1 lb. sugar.
¾ oz. gelatine.
Vanilla flavour.

11 per cent. fat.
5 pints heavy cream.
4 pints milk.
2 pints condensed milk.
1 lb. sugar.
1 oz. gelatine.
Vanilla flavour.

10 per cent. fat.
4½ pints heavy cream.
4 pints milk.
2 pints condensed milk.
1 lb. sugar.
1 oz. gelatine.
Vanilla flavour.

Dissolve the sugar and gelatine with heat, but do not boil the whole. If gelatine is heated too much it putrifies.

There is no necessity at all to continue these recipes, as the reader may have noticed that they are all of one family, one or two ingredients at the most being changed to reduce or raise the butter-fat content or percentage. When we are dealing with American ice cream later on we will go into many more recipes of all flavours until we will have exhausted this most interesting and profitable section of our trade.

Water ices are the cheapest of all ices, and yet are so cooling and refreshing in summer that many patrons prefer them to the milk or cream ices, considering these too heavy and sickly in summer. They are made and frozen more quickly than any other ice, provided not too much sugar is used. This is the best known recipe for water ices:—

4 quarts water.
2 lbs. sugar.
Juice of 6 lemons.
Slight lemon colour.
Whites of 6 eggs.

Some boil the sugar in the water; others merely dissolve it by constant stirring. Others, again, keep the whites of eggs for water ices, reserving the yolks for milk ices, a very good practice, as when cornflour or gelatine is already in the ice cream the white of eggs is only an extra thickener.

This is the process: Dissolve the sugar in the water, whip up the egg whites and add to the water. Allow to cool (never place warm "mixes" in the freezer), and when you are ready for freezing add the juice of the six lemons and the colour (if you are thinking of using any), and pour through a strainer into the freezer. The rest is the same as for ice cream.

Many make use of the lemon rind as well as the juice for flavouring purposes. In fact, no one can deny that in the yellow zest or rind there is a very useful flavour. As it is very difficult to peel off this very thin rind without cutting off some of the thick white peel that is underneath it, and which is far from nice to the taste, one should either make use of a scraper that is not likely to cause this inconvenience or resort to the old method of rubbing the yellow off with lump sugar, using this sugar, of course, for the water ice. However, each trader has his own experience to overcome these small difficulties, and we will leave him to it. The important thing is to produce a very delectable and beautifully flavoured ice; the end justifies the means, even to the extent of using lemon essences and cordials. And why not? Some of the best traders have solved all their flavour problems by making a good stock of fruit cordials and using them, not only for hot drinks in winter, but for flavouring ice cream, water ices, and also for garnishing these when serving them as sundaes. Of course, when one uses sweet cordials the mix will have to contain less sugar, and the cordial itself will have to be as innocent of tartaric or citric acid as possible when used with cream or milk.

Water ices come in for the variegated flavours that all other ices have, and, being cheaper, it is up to the trader to push them for all he is worth. I know many shops that simply coin money in summer with ices that the customers simply rush for, and do you know what the attraction is? Good flavour and an ice that is not too sickly, *i.e.*, a mixture of water ice and milk ice that has all the attraction of the best without that "enough" feeling that makes the customer prefer to go out for a walk rather than order another ice. One can say what he likes about the ethics of serving an ice thus, which is neither one nor the other; but what matters when you make a first-class article, create a large sale, and earn extra profits by pleasing customers? After all is said and done, this is the very secret of good salesmanship.

Other lemon water ices are made with the following recipes:—

4 quarts water.
20 lemons (juice only).
3½ lbs. sugar.
½ oz gelatine.

4 quarts water.
30 lemons (juice only).
3½ lbs. sugar.
8 ozs. Scotch cornflour.

An American water ice, used in one of the dairy colleges attached to the universities, where ice cream, etc., is studied from "top to bottom," is made thus, and is known as a sherbet or sorbet (Italian *sorbetto*):—

4 quarts water.
1 pint lemon juice.
1 gill orange juice.
4 egg whites.
4 lbs. sugar.

Lemon juice goes well with practically any other flavour; in fact, it helps to bring out the pronounced flavour of fruits as salt enhances the taste of cooked foods. For instance:—

STRAWBERRY WATER ICE.

4 quarts water.
2 lemons (juice).
From 3 lbs. to 6lbs. strawberries.
3½ lbs. sugar.
Whites of from 6 to 12 eggs.

One may ask, are strawberries always strained in ices? It may be controversial, but the fact remains that customers rarely, if ever, like to see vanilla pods, lemon pips, strawberry pulp, or anything similar in their ices. And yet they have a natural curiosity as to whether they are partaking of a real fruit food or a substitute. It is human nature all over, and the best thing to do is not to discuss it or try and solve it, not even to find out if it is the frozen pieces that irritate customers. Just do as you think best, remembering that most traders only put the fruit in the freezer when the ices are nearly frozen.

Some boil the fruit, water and sugar, and then strain the lot before it cools, and only add the lemon juice when pouring the cold mix in the freezer. Others rub the strawberries down with sugar until it is all a uniform mass, strain through a hair or wire sieve, and use part of the water, or all of it, to catch the remains of the pulp, and pass all this through the strainer.

It is a custom to add strawberry essence (just a little), and even colour, such as carmine, to give the strawberry water ice more attraction. Here, again, the trader's judgment must come in.

Another method is:—

Boil:
4 qts. water.
3½ lbs. sugar.
8 ozs. Scotch cornflour.
Allow to cool.

Add:
Whites of 16 eggs.
Strawberry juice or essence.
Colour.

In America the following strawberry water ice recipes are used:—

4 qts. water.
4 lbs. sugar.
4 pints strawberry juice.
4 tablespoonsful lemon juice.
8 tablespoonsful raspberry juice.
2 teaspoonsful orange flower water.

Or

4 qts. water.
3 pints strawberry juice.
4 lbs. sugar.
6 lemons (juice).

Or

4 qts. water.
4 qts. strawberry juice.
4 lbs. sugar.
6 lemons (juice).

One of the most attractive advertisements for strawberry ices is the display of fresh, ripe strawberries in the window or on the counter, especially when the day is hot. Town life has not atrophied altogether the natural craving for fruits and herbs that is still part of human nature. The sight of fruit, salads, etc., simply make one want to purchase them when the weather is hot. Get a silver dish, oval and flat for preference, lay some strawberry leaves on it, and then display the ripe strawberries on the leaves. This is the most attractive " pull " one can think of, especially if an imitation ice (careful with colours, please!) is placed beside it. One helps the other to sell.

Perhaps, taken all round, the use of tinned fruits is the easiest way out of the fruit trouble—if it is a trouble at all. But no one can deny that in season fresh fruit is always cheaper than the tinned variety. It is left to the trader to decide which he will use, with the simple caution that the syrup in the tins means less sugar to be added to the recipe. Bottled fruits generally contain less sugar than tinned fruits; jams (which may also be used for all ices) generally contain more. So be careful with your proportion of sugar, not only because of the waste of money, but also for the time and ice lost in freezing. Sugar retards freezing.

It is understood that any kind of fruit may be used in ices. However, the time has not yet arrived when a trader in Britain is expected to " run " about a dozen flavours, as they do in the States. For the present I would advise a choice selection of cordials or syrups to pour over an ice cream or water ice should the customer desire something different from your stock flavour for the day. After all is said and done, the basic ice is one, and the flavour is another, of two very simple things. In Germany actual unfrozen mixes are stored in bottles or jars containing taps, just over a freezer of the rotary type—*i.e.*, a drum containing ice and salt. If the customer wants a strawberry ice, this flavoured mix is poured on to the freezer, the handle turned, the scraper operated, and out comes a measure of strawberry ice on the plate which is given to the customer. The same operation is employed for orange ice, banana ice, and so on.

With the promise to return to water ices later on, I will end the chapter with a recipe for chocolate ice, which is always a good seller, and should be pushed more:—

CHOCOLATE ICE.

4 qts. water.
3½ lbs. sugar.
1 lb. unsweetened chocolate or cocoa.
A dash of vanilla flavour.

The whole of this, excepting the vanilla, can be boiled, cooled and frozen, less or more cocoa being used according to the customer's taste. Try it.

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Chapter III.—American Ice Cream Classifications.

To classify all ices methodically one should adopt the American names rather than the Italian, although the former are inclined to be used for "factory ices," whereas the latter groups would suit bakers, confectioners, etc., more. However, we will deal with these later on.

In America ices are classified thus:—

1. Plain ice cream.
2. Nut ice cream.
3. Fruit ice cream.
4. Bisque ice cream.
5. Parfait.
6. Mousse.
7. Pudding.
8. Aufait.
9. Lacto.
10. Ices (including Sherbet, Milk Sherbet, Frappe, Punch and Souffle).

PLAIN ICE CREAM

Vanilla Ice Cream.

1¼ gallons of 25 per cent. cream.
2 lbs. of sugar.
Vanilla.

(These recipes make 2½ gallons when whipped up in an American freezer. Cream whips more than milk. A pinch of salt to each gallon of cream helps to improve the flavour.)

Chocolate Ice Cream.

1¼ gallons of cream.
2½ lbs. of sugar.
6 ozs. of bitter chocolate.
Vanilla.

Maple Ice Cream.

1¼ gallons of cream.
1½ lbs. of sugar.
½ lb. of maple sugar.
½ oz. of caramel.
Vanilla.

Caramel Ice Cream.

1¼ gallons of cream.
2 lbs. of sugar.
3 ozs. of caramel.
Vanilla.

Coffee Ice Cream.

1¼ gallons of cream.
2 lbs. of sugar.
Extract from ¼ lb. of good coffee (fresh boiled).

Mint Ice Cream.

1¼ gallons of cream.
2 lbs. of sugar.
1 gill of concentrated creme de menthe syrup.
A few drops of green colouring.

NUT ICE CREAM.

Walnut Ice Cream.

1¼ gallons of cream.
2 lbs. of sugar.
1 lb. of walnut meats.
Vanilla.

Other Nuts.

Chestnuts, filberts, hazel nuts, pecans, peanuts, almonds, pistachios, etc., may all be used in the same proportion as walnuts to make nut ice cream. Pistachio ice cream, when made from the oil instead of the nuts, would be considered a plain ice cream, and not a nut ice cream.

FRUIT ICE CREAM.

Strawberry Ice Cream.

1¼ gallons of cream.
2 lbs. of sugar.
1 pint of crushed strawberries.
(A little lemon juice and even colour may be added if desired.)

Pineapple, raspberry, cherry, peach, apricot, currant, grape, cranberry, etc., ice cream may be made on the same principle. Lemon or orange ice cream is more of a plain ice cream than a "fruit."

Lemon Ice Cream.

1¼ gallons of cream.
2½ lbs. of sugar.
½ pint of lemon juice.
1 gill of orange juice.

Orange Ice Cream.

1¼ gallons of cream.
2 lbs. of sugar.
1 pint of orange juice.
½ gill of lemon juice.

BISQUE ICE CREAM.

Bisques are made with bread crumbs, marshmallow, macaroons, etc.

Macaroon Ice Cream.

1¼ galls. cream.
2 lbs. sugar.
1¼ lbs. ground macaroons.
Vanilla.

Grape nut, wafers, sponge cake, marshmallow, etc., ice cream can be made similarly.

PARFAIT.

Egg yolks, nuts and fruits make parfaits differ from a plain ice cream.

Walnut Parfait.

1 gall. heavy cream.
30 egg yolks.
3½ lbs. sugar.
1 lb. walnut meats.
Vanilla.

Any kind of fruit can, of course, be substituted for walnuts and the name changed accordingly.

Coffee Parfait.

1 gall. cream.
30 egg yolks.
3½ lbs. sugar.
Extract of ¼ lb. coffee, freshly boiled.

Maple Parfait.

1 gall. cream.
30 egg yolks.
1 lb. maple sugar.
2½ lbs. sugar.
½ oz. caramel paste.

Tutti Frutti Parfait.

N.B.—"Tutti frutti" is Italian for "all fruits," and should not be spelt in any other manner.

1 gallon cream.
30 egg yolks.
3½ lbs. sugar.
Vanilla.
¾ lb. glacé cherries.
¾ lb. glacé assorted fruit.
¾ lb. pineapple.

MOUSSE.

Mousse is a whipped cream to which sugar and flavour are added.

Cranberry Mousse.

½ gallon heavy cream.
1 lb. sugar.
½ pint cranberry juice.
Juice of 2 lemons.

Any other fruit juice may be substituted.

Mousses should sell well where the clientèle is fastidious and not afraid of paying for good ices. One good selling line in the States is Sultana Roll Mousse, the centre being a tutti frutti, the outside pistachio. It is frozen in a mould, of course.

PUDDING.

Puddings are made from cream, milk, sugar, eggs, nuts and fruit, and highly flavoured.

Nesselrode Pudding.

(A very well-known recipe.)

¾ gallon cream.
30 eggs.
2½ lbs. sugar.
Vanilla.
1½ lb. glacé cherries and assorted fruits.
1 lb. raisins.
1 lb. marrons.
1 lb. almonds.

Manhattan Pudding.

¾ gallon cream.
30 eggs.
3 lbs. sugar.
1 pint orange juice.
1 gill lemon juice.
1 lb. walnut meats.
1 lb. pecan meats.
1 lb. cherries and assorted fruit.

Plum Pudding.

¾ gallon cream.
30 eggs.
2½ lbs. sugar.
10 ozs. chocolate.
1 lb. cherries and assorted fruits.
½ lb. raisins.
½ lb. figs.
4 ozs. walnut meats.
1 level tablespoonful ground cinnamon.
Small pinch ground cloves.

AUFAIT.

Aufait is a brick or large "hokey-pokey" made with alternate layers of cream and fruit. More than one flavour of cream is generally used. For instance, vanilla ice-cream, halved figs, strawberry ice cream, figs, chocolate ice cream, figs, vanilla ice cream.

Then, again, the alternate layers of fruit may be different and one can well imagine the attraction of various layers of cream, all differing in flavour, between layers of, say, strawberries, figs, pineapple, black currants, etc.

ICES.

Ices are divided into five groups: Sherbets, made from water, sugar and egg whites; milk sherbets made from fresh or skimmed milk; frappe, generally served half frozen; punch, made from liqueurs; souffle, made with whole eggs.

There are hundreds of recipes for ices as there are for ice creams.

Lemon Sherbet.

6 quarts of water.
6 egg whites.
6 lbs. of sugar.
1 pint of lemon juice.
1 gill of orange juice.

Orange, pineapple, peach, cherry, ginger, strawberry, etc., sherbets may be made on the same basis recipe. Always add lemon juice to orange, pineapple, cherry, ginger and strawberry. It helps to enhance the flavour of the fruit.

Pineapple Milk Sherbet.

6 quarts of milk.
5 lbs. of sugar.
6 egg whites.
1 quart of pineapple pulp.
½ pint of lemon juice.

Punch.

4 quarts of water.
6 lbs. of sugar (not less).
½ gallon of currant jelly.
½ gallon of orange juice.
1 quart of lemon juice.
16 bottles of ginger ale.
½ gallon of Maraschino cherry juice.

This is only one of the many recipes for punch. Each trader can add other ingredients to satisfy his or his customers' wishes.

SOUFFLE.

Pineapple Souffle.

3 quarts of water.
12 eggs.
3 lbs. of sugar.
1 quart of grated pineapple.
½ pint of lemon juice.

Thus far the American classification and basic recipes for each. What now of the artistic Italian ices, still unmatched for beauty of service and flavour? Not even the best Italian restaurants and hotels outside of Italy prepare them in full; one has to go to Italy to enjoy them, in every conceivable shape and design, from bombs to baskets of fruit, each fruit a different flavour!

There are the cream ices, milk ices, water ices, *spumosi* to fill the various shapes; *spumoni*, lighter still, a mixture of cream, marshmallow, and meringue; *lattemiele*, whipped cream and Oriental flavours; *bombe cassate*, a dream of cream and biscuits soaked in liqueurs; *gelati fantasia*, fantastic designs and flavours; *gelati sorpresa*, surprising in their effects; luminous ices, set alight with spirits as we do our Christmas puddings; toasted ices, being slices of brick ice cream dipped in crumbs of bread or biscuits, then in batter, and actually fried and served with castor sugar; *marenga*, *bavaresi*, *bianco mangiare* (blanc-mange ices), *gelatine*, *bordure*, etc.

There seems to be no end to methods, designs and flavours, and one must credit the Italians with much ingenuity; in fact, in Italy you can get any sort of cake, no matter how intricate the design, made of ice cream, each colour being a different flavour. And you know how beautiful some cakes are!

Chapter IV.—Brick Ice Cream.

Isn't it strange how the old-fashioned Neapolitan ices, generally called "hokey-pokey," have come into their own again? For what are bricks but a two or three flavoured and coloured ice cream or milk ice, frozen in large moulds, cut up into pint or quart bricks, packed in parchment paper and a cardboard box, and kept hard in the containers (freezers) just as hokey-pokey was?

Here is the selling line of the future! In America, the land of ice cream, bricks have revolutionised the trade. There are actually more gallons sold in brick form than in loose or bulk. It stands to reason that a customer, seeing a neatly packed ice cream brick, and knowing that it will keep hard for a few hours, will decide to take one home to give her family the same kind of treat as she has just given herself at the soda fountain or ice cream bar. Last year, in London and other towns of the United Kingdom, the sale of bricks during the heat wave was phenomenal. And it will increase every year.

In America there is special machinery to freeze, mould, harden, wrap, and then pack ice cream bricks. For our purposes we must deal with the making of them in a small way, suitable for the average shop.

Decide what prices your customers are likely to pay for the bricks, so that you will know whether to make a cream, milk, or sherbet ice. Procure a hokey-pokey mould from your suppliers, one about 2½ or 3 inches deep, 18 inches long, and 12 inches wide. This mould is generally made of zinc or tin, and both the top and bottom can be removed with a little pressure to allow a thorough cleaning, which is absolutely imperative after each use. It should be well made, and be so tight-fitting as to make it waterproof, otherwise the salt water will get in and spoil everything. Get a stock size, so that you may order more should your sales increase, which they undoubtedly will.

You also want an enamel bowl and a plated trowel, and, if you have no large ice cream tubs, an iron or zinc tank or wooden tub in which to freeze the mould for five or six hours.

Let us suppose you are going to make a two-flavoured brick, say vanilla and strawberry, which is the favourite. You will follow, more or less, the system adopted years ago by the Italians, changing the hours to suit yourself, as you will the recipe.

Prepare a good vanilla mix, half cream and half milk, and freeze it until it is nearly stiff. Extra gelatine or cornflour is advisable for bricks, but is not absolutely necessary. Have the mould ready, nice and clean, remove the top and bottom, and grease the edges with butter, lard or similar fat. Replace the bottom, cover this and all the inside of the mould as neatly as possible with a sheet of waxed paper or neat strips for the sides and two large sheets for top and bottom, so that the finished brick will leave the mould evenly and neatly, and spread in the mould, as quickly and as evenly as possible, enough vanilla ice cream to fill the mould half-way up. Level the cream with the towel, remembering that much of the attraction of the brick is lost if the two colours run into each other.

Place a similar quantity of the vanilla ice cream in the enamel bowl, add strawberry flavour and colour, paying attention to the danger of making it too sweet, too coloured, etc., mix it thoroughly with a wooden spoon, as used for ice cream making, until it is all one coloured mass, and quickly spread it over the vanilla ice cream in the mould. Level it off with the trowel, clean the edges, fix the lid on carefully and tightly, grease the edges again (some run a strip of gummed paper round the edges, others pack the mould in waxed paper), tie a thin rope round the mould and place it in the tank or tub, leaving one end of the rope hanging over the side, so that after the hardening is done you can remove the mould without having to dip your hand and arm in the salty (and cold!) water.

Care should be taken that a good layer of thickish ice and plenty of salt completely *surround* the mould on all sides, otherwise the hardening will be a failure and your bricks will be left on your hands a complete loss to you, as they cannot be turned into anything, excepting coloured ice cream.

This is the operation when using more than one mould. Strew ice and salt on the bottom of the tank or tub, place the first mould in, and make one knot at the end of the rope hanging over the side. Add ice and salt over the mould and around the sides, place the second mould with two knots at the end of the rope; then more ice and salt, the third mould, and so on. The top of the last mould should be heavily covered with ice and salt.

What space should be left round the moulds for ice and salt, supposing the tank or tub is very wide, etc.? One must observe how freezers are made. The smaller ones have about 1½ in. space between freezer and tub to allow sufficient ice to freeze with; the larger ones have about 2 in. Brick moulds should have about 3 in. If the tank is too large, place some boards or pieces of wood, etc., all round it, so as to reduce the space and your ice bill.

The moulds should remain immersed in the tank for at least five or six hours. That is why Italians froze and moulded their hokeys at night time and packed them up early in the morning, making use of the freezing hours to have their night's sleep. In fact, it is not only customary but essential that ices, bricks, etc., should be finished with as early as is convenient, so that once all the fuss and mess is over one can change into shop clothes and attend to the selling part of the business. This cannot be done in a small place in the afternoon or evening without disturbing some arrangement or other in the shop. However, if you have others serving, or a staff to make your ices, there is no necessity for making your ices until you actually require them, say, the afternoon or evening. In fact, some traders adopt this system and say that their customers prefer the "fresh" taste. In America this would be laughed at, as it is proved that the ideal flavour in ices is that which is obtained by "maturing" or hardening them for a few hours. This makes all the separate flavours, such as cream, milk, sugar, gelatine or cornflour, vanilla, fruits, etc., mingle into one homogeneous bouquet, and the customer relishes it without noticing and speaking about flour, milk, etc.

Leaving each trader to please himself, we will now get on with the packing. You require a table, a bath of hot

water, running water, parchment or waxed paper, a long, sharp knife, brick boxes, and a tub and container well packed with ice and salt over and above the level likely to be reached by the bricks inside. It is a usual mistake with novices to pack ice to the same level as the ice cream, etc. In a few minutes the salt causes the ice to melt—and what happens? The top layers of ice cream start melting too! Besides, cold goes downwards and helps to freeze the ice cream that is below it.

Remove the first mould from the tank—*i.e.*, the one with one knot at the end of the rope, and wash it under the tap, so that all the salty water will be removed, especially round the edges. Then dip the mould quickly in the hot water for not more than two or three seconds. Wipe it carefully with a clean towel (there should always be clean towels in an ice cream factory), and place it flat at one end of the table. In the centre of the table place a large sheet of clean paper, remove the top and bottom lids of the mould, and hold it squarely over the paper. The hot water should be sufficient to cause the ice cream to slowly leave the mould and drop evenly on the paper. If it does not, tap the edges all round repeatedly. At a pinch you can pass a clean long knife carefully and slowly all round the large brick, but how many disasters I can remember to the colours through this method!

Once the brick is ready to be cut up it should be done quickly. Remember that all the time it is away from the ice and salt the surfaces are gradually melting and turning into that sloshy condition that freezes into "icicles" when replaced in a container, and causes your customers to say that you have let pieces of ice get into your cream!

Decide the size of bricks you intend selling, whether half-pint or pint, etc. (the brick boxes at your side should prove that you have already decided on this), mark the brick into smaller bricks with the back of the knife, first lengthwise and then sideways, then cut evenly with the knife. The best utensil to use is a double-handled knife—cutter or "chopper" as some call it—it makes for even cutting. Then quickly wrap each brick in its paper evenly and neatly, remembering that customers retain the impression of the way things are packed just as long as they remember the flavour of a thing. Slip each wrapped brick into its box (some merely use another paper wrapper, leaving the box for the time that the customer asks for the brick), and pack in the container, making sure that the ice and salt have not wetted the inside with moisture or icicles, as they generally and naturally do. In some factories, where many moulds are frozen, the hokeys or bricks are placed in the dry container, and the ice and salt are packed round the container little by little, to prevent this moisture spoiling the paper.

The proportion of salt should be more than as used for just freezing ice cream, and the ice should not be chopped too small. Make sure that the ice and salt reach a few inches higher than the top bricks, and that some cloths are packed down round the container to prevent air, especially in hot weather, melting the ice.

Special cabinets are used in America, and are also used to some extent over here as well, to store ice cream bricks. They make neat furniture, and are made on the best principle, *i.e.*, a tap near the bottom allows one to run off the water when more ice and salt have to be added; the container is completely surrounded by ice, even at the top, where a zinc lid covers the container. The sales operation is this: To serve the customer you lift the wooden lid of the cabinet. As you do this, the zinc lid, on which ice rests, also lifts and reveals the inside of the container, in which the bricks, either in parchment paper or boxes, are tightly packed to prevent air getting in and to freeze the better.

It should be said that the ideal container for bricks should be square, and made to measure, so that the bricks will pack tightly in it. The round container, of course, is best for bulk ices served in shops with glasses.

So far we have dealt with a two-colour brick. But there is no necessity to make a long story of the three-colour or four-colour bricks. The trader will understand that all that is required is a clean bowl (perfectly dry, as drops of water freeze into undesirable icicles) for each flavour to be added, such as chocolate, peach, black currant, and so on; also that a three-flavoured brick means, in a 3-inch mould, about 1 inch of vanilla, another of chocolate, and then another inch of strawberry. The trader will also understand, without a long lecture, that if he prefers he can make three separate flavours of ice cream in three separate freezers, and mould the flavours thus instead of resorting to the bowl, flavour and colour.

In America bricks are not always made with horizontal colours. Some are made with the colours perpendicular, or slanting diagonally, and so on. And there is a great demand there for specially moulded ices for parties, birthday functions, association meetings, etc. Take, for instance, a special ice for the birthday party of a girl named Rose. This would be catered for in the States by either presenting to each guest an " individual " ice cream in the shape of a large letter " R," preferably of a rose or strawberry coloured ice cream, or else a small brick or round slice of vanilla ice cream having in the centre the letter " R " in strawberry, or else, as near as possible, the shape of a rose itself. These are made by filling a centre mould (there are hundreds of shapes) with strawberry ice cream and placing it in the centre of the larger mould (something like a jam roll mould) filled with vanilla ice cream. Both are frozen together, and the centre mould is made to slip out, leaving its contents neatly embedded in the vanilla. This is only one of the many possibilities to make money. Masonic banquets invariably have ices shaped to resemble masonic signs.

Moulded ices were the *sine quâ non* of Italian restaurants, and most customers preferred to have their own favourite " individuals " than a mere glass of ice cream. Where " peche Melbas " (a sundae consisting of ice cream, one or two halves of a peach, and raspberry or strawberry syrup) are not used for the ice at a public dinner or banquet, one generally sees the waiters carrying a large pyramid or cone of ice cream, either coloured diagonally or perpendicularly, and serving each guest with a portion from it. These are easily made by filling the large mould with the various coloured and flavoured ices, packing it carefully and tightly with ice and salt, and attending to it as one would to a large ice cream brick.

Hokey-pokeys, as everyone knows, are cheap Neapolitan ices, which, in their turn, are small slices, generally 2 in. by 2 in. by ½ in. thick, cut from the large brick, packed in white paper, and then in the container. They generally sell at 1d. or 2d. each. Sometimes children are served with half, at half the price, of course, attracted to them by seeing one cut diagonally across, showing the colours and causing them to wonder how the " colours got in like that."

ESKIMO PIES.

There has been much ado in the ice cream trade, not only in the States, but also over here, over the introduction and huge sales of " coated ice cream," generally a lump of ice cream coated with chocolate, and selling like a bar of chocolate at 3d., or slightly more. Many other shapes have been introduced, such as baseballs, cones, chocolate cornets, which the trader fills with ice cream, and so on, but the best seller has been the Eskimo Pie, and such a success has it been that special machinery has been placed on the market for cutting the fingers or small bricks of ice cream and coating them with chocolate. America went Eskimo Pie mad and purchased millions.

The pioneer of this boom was an unknown school teacher or student called C. K. Nelson, who, after many refusals, found a Mr. Russell Stover to finance the idea, and assigned one-half of the patent to him, No. 1,404,539 of 1921. They started packing these chocolate ice cream fingers in tinfoil and coloured labels, and met with success. The idea spread, and their wholesale customers increased by leaps and bounds. Not to infringe the patent, many wholesale factories obtained a licence from them to make the " Eskimos," purchasing the labels from them at a price that gave the patentees a good profit, reaching into thousands of dollars. Others chanced making them, and were ordered by the Supreme Court to stop, as it was an infringement of the patent.

The situation over here is rather peculiar from a legal point of view. Under the International Convention the British patents should have been applied for within twelve months of the American. This was not done till May 2nd, 1922, for " Esquimau Pie," and the British Patents and Designs Act does not allow patents on foodstuffs that are not made under a special, novel or hitherto unknown process. These pies are merely lumps of ice cream dipped in ordinary chocolate and then wrapped.

Firms have sold them over here as Choc-ice, Arctic Delights, etc.

To the small trader who cannot or will not install special machinery the following instructions should prove useful:—Freeze plain vanilla ice cream in the usual hokey-pokey moulds as hard as possible. Any other flavour will do, of course. Obtain a small coating table and pan from chocolate machinery makers, and make a good batch of chocolate with about 5 per cent. more cocoa butter than is generally used for chocolate. Keep the chocolate at 90 degs. Directly over the pan have about 24 wires stretched horizontally, the ends being fixed in pieces of wood, or bound to them, so that space is left between the wires. Some have round pieces of wood, like drum tops or gramophone records, and the wires are fixed round the circumference. You also require about 200 little wire hooks.

As soon as the chocolate is ready and the bars of ice cream are cut insert a hook in the bar, dip it into the chocolate until it is properly coated, but as quickly as possible, and hang it on a wire, allowing the drips to fall in the pan. As soon as they are dry remove the hooks, dab with chocolate the uncovered spot made by the hook, cover with tissue paper, tinfoil and a neatly coloured advertisement label and pack in a dry freezer surrounded by ice and salt.

Like hokey-pokeys, they should be kept conveniently hard, otherwise the various covers of paper will soak and spoil, and customers will not be attracted to purchase them.

There is certainly a great sale for these pies over here. Chocolate is a flavour that goes well with ice cream, and pies can be purchased to take home, which is another advantage. They generally sell by the half-dozen, and make a good advertisement for your ice cream, soda fountain, etc.

Chapter V.—Sundaes.

It is about time that we came to the serving of ice cream. You are familiar with the word *sundae;* it stares you out in practically every street now, and is displayed not only in every shop that boasts a real soda fountain service for ice cream, but also in the lesser establishments where a little ice cream (?) is sold by a trader who, however, knows how to buy an attractive window-slip when he sees one. It is a case of assuming a virtue if you have it not, as Shakespeare said.

It should be pointed out that the well-known Scottish and English " cream and raspberry " (called " McCullum " in Scotland)—*i.e.*, a measure of ice cream with some raspberry cordial poured over it—is not actually a *sundae*, but a college ice. Here are the actual definitions of these varieties of ices.

College Ice.

A measure of ice cream or sherbet, or even crushed ice, with one kind of fruit syrup or crushed fruit.

Sundae.

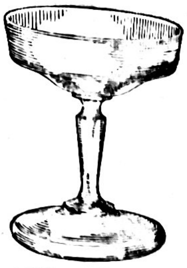
An elaborated College ice, consisting of a measure of ice cream, with one or more syrups, crushed fruits, nuts, whipped cream, and generally a topping such as whipped cream or marshmallow.

Dessert.

An elaborated sundae, with one or more flavours of ice cream or sherbet, crushed or glacé fruits, nuts, whipped cream, cake or ice biscuits, and topped with a fancy dressing.

The well-known *banana split* is a dessert, and not a sundae.

In spite of the above three distinct definitions, I actually advise small traders to use the one word sundae for their every-day sales. There are already complaints that there are too many names—and fanciful, erratic and rag-timish at that—in the soda fountain and ice cream trade, and that customers are bewildered and gradually " put off " in the face of such peculiar and mystic names. A " peach Melba " or a " banana split " explain themselves and whet the appetite of a prospective customer, but this cannot be said as yet in Britain for such names as Chautauqua Special, Come Along Sundae, Excelsior Mix-up, Malpecque Mounts, On the Square, Shot and Shell, Texas Trophy, Theda Bara Special, Ting-a-ling, and so on *ad infinitum*. The time has not yet come over here to feel a necessity to show these names, although they are as common as heat



Nickel-Silver Sundae Cup.

waves and blizzards in the States; and the public, great ice cream eaters at any time, know more about them there than traders do here.

My advice is to gather a few sensible dishes and names and stick to them, charging different prices according to the extra cost of the extra ingredients used in them.

Cream and Raspberry.

This is the cheapest, and it may be seen sold in every small ice cream shop in the United Kingdom. I have known even ice cream stalls to carry a bottle of raspberry cordial to serve this with, just as they used to carry water ice and real lemons (generally sliced in the latter) for the well-known " ha'porth of mixed on a lemon, Jack." Service: Use one measure (say, 24 or 20 or 16 to the quart) of ice cream in a sundae cup or on a saucer, and about one and a half or two tablespoonsful of raspberry cordial,

raspberry fruit juice, or even raspberries and juice. Insert the corner of a plain ice wafer or sugar wafer biscuit in the top of the ice cream, and place the spoon at the side, so that it does not get wetted and made sticky by the liquid. The best plan is to place the saucer on another, about 2 ins. wider. Another way of serving this is to pour a small ladleful of whipped cream or marshmallow over the top. Some even place a raspberry or a strawberry at the summit of the ice cream. Do as you think best, but do not forget to charge for extra goods. It is a fool's game to sell a plain measure of ice cream at, say, 4d. or 6d., and then make no extra charge for fruit, syrup, marshmallow or whipped cream. The only free gift to your customer is plenty of cleanliness and light, unless you wish to give the Continental touch to your service, and place a clean glass of fresh water by the side of the ice cream. This allows the customer to drink off any flavour that happens to remain in her mouth, and so relish the ice cream better.

Chocolate Sundae.

One measure of ice cream and a ladleful of chocolate syrup. This syrup is made from a cocoa or chocolate paste, sugar and water.

Chocolate Nut Sundae.

A measure of ice cream, a ladle of chocolate syrup, a few chopped walnuts, a little whipped cream or marshmallow, and a cherry on top.

Maple Nut Sundae.

Ice cream, 2 ozs. of real maple syrup; sprinkle with chopped walnuts and top with whipped cream.

Strawberry Sundae.

Ice cream, 2 ozs. crushed strawberries and syrup; decorate with one or two fresh berries.

Strawberry Puff Sundae.

Served in a tall glass preferably. Ice cream, one ladle of crushed strawberries, chopped nuts, and fill the glass with whipped cream.

Strawberry Creme Sundae.

One measure of strawberry ice cream, marshmallow sauce, one spoonful of nuts, whipped cream, and top with a fresh strawberry.

Strawberry Delight Sundae.

One large measure (12 to quart) of strawberry ice cream, a ladle of crushed strawberries, a little mallow-creme (something like whipped cream or marshmallow); sprinkle a few crushed nuts over the top and balance one cherry on the summit. Around the edges decorate a few slices of banana.

Peach Melba Sundae.

Known as Peche Melba all the world over. One or two halves of a peach, one measure of ice cream, and plenty of raspberry or strawberry syrup

Peach Royal Sundae.

Served in a tall glass. Whipped cream in the bottom, then a ladleful of sliced peaches, a small measure of ice cream, crushed pecan nuts on one side of the ice cream, a wafer on the other, and then whipped cream; then top with whole pecan nuts and a Maraschino cherry.

Peach of a Sundae.

One measure of peach ice cream and a ladleful of maple nut syrup, made from maple syrup and finely chopped nuts.

Peacherine Sundae.

About 2 ozs. of raspberry syrup in a sundae cup and a measure of peach ice cream. This is one of those " plain " sundaes that are likely to look too plain if a wafer is not served with it.

Lady Mary Peach Sundae.

One ladle of whipped cream, a measure of strawberry ice cream, four slices of a peach with some juice, more whipped cream, and top with a cherry and a little grated nutmeg.

Cherry Sundae.

Ice cream and cherry syrup or cordial; top with a cherry, and place a wafer on its edge near the cherry.

Cherry Sundae No. 2.

Ice cream, decorate with a few Maraschino cherries, one ladle of cherry phosphate syrup, whipped cream, and a cherry to top the lot.

Maraschino Cherry Sundae.

Cherry ice cream (vanilla ice cream by itself or flavoured and coloured to resemble cherry ice cream will do), whipped cream and a cherry.

Cherry Royal Sundae.

A measure of ice cream in the centre of a saucer, a ring of cherries round the ice cream (large black ones look best), a ladle of cherry royal sauce, whipped cream, and a red and a green cherry.

The cherry sauce is made thus: Stem and stone 1 lb. red cherries, and cook them in 1 quart of water until they are done. Strain well repeatedly; add 3 lbs. of sugar to the juice, and boil until thickish. When cool add 2 ozs. port wine and keep cool.

Cherry Bon-Bon Sundae.

Serve in a tall-stem glass. Small portion of ice cream, plenty of shaved ice, 2 ozs. cherry syrup, more ice cream, and top with a Maraschino cherry.

Cherry Sandwich Sundae.

Also served in a tall glass. A little whipped cream, vanilla ice cream, 1 oz. cherry syrup, some pineapple sherbet or water ice, more whipped cream, and a cherry on top.

Cherry-Nut Sundae.

Ice cream, cherries, whipped cream, and a little grated coconut or crushed almonds.

Cherry Dip Sundae.

Try to arrange a circle of six red Maraschino cherries round the top of a measure of ice cream, placing one green one in the centre. Over this pour Maraschino liquid. There is hardly anything in our trade that makes a better impression on our customers than gently and neatly decorating cherries on a sundae by means of silver tongs, or something that looks like them. Such methods as using one spoon or ladle for all the various " services " connected with sundaes are as wrong as they are foolish. It is the artistic touch that satisfies customers and makes them come back again.

Golden Sunset Sundae.

Vanilla ice cream, a ladle of crushed orange fruit, another of crushed cherries, whipped cream and a cherry on top. Looks very attractive, hence the name.

Mexican Cherry Sundae.

A measure of ice cream, cone-shaped if possible. Insert slices of an orange all round this, top with a cherry and sprinkle with Mexican pecans. This is served in America with Mexican pecan wafers and a small silver spoon.

Pineapple Sundae.

Vanilla ice cream and pineapple syrup or cordial.

Pineapple Sundae No. 2.

Vanilla ice cream, a ladle of crushed pineapple and a wafer.

Pineapple Sundae No. 3.

Pineapple ice cream, crushed pineapple, whipped cream and topped with a cherry.

Havana Pineapple Sundae.

Half a slice of pineapple on a saucer, vanilla ice cream, two or three cherries, whipped cream and grated or crushed nuts.

Pineapple Freeze Sundae.

Two measures of pineapple ice cream, sherbet or water ice, a ladle of crushed pineapple fruit. Place over this a slice of pineapple and one of orange, and top with whipped cream and chopped cherries.

Walnut Pineapple Sundae.

Ice cream, crushed pineapple and crushed walnuts. Some serve this with walnut halves.

Hawaiian Pineapple Sundae.

Pineapple ice cream, fresh strawberries, whipped cream and a cherry.

Italian Sundae.

Either one measure each of vanilla and chocolate ice cream or half measure of each in one ball; pour over this some chop-suet syrup, some whipped cream and a few fresh strawberries.

Bismarck Sundae.

Vanilla ice cream, chopped dates and figs, maple syrup, and top with whipped cream.

Hot Maple Sundae.

Ice cream, a ladle of hot maple syrup, some ground hickory nuts, and a couple of ice wafers.

All the above sundaes are merely a fraction of the hundreds that are served all over the world. There is very little difference between them, even when the names are changed to suit local tastes. A " Manhattan " or a " Broadway " is naturally called a " Westminster " or a " St. Paul's " over here, not to mention the many provincial names that have gradually accumulated. It is a pity the American names have become so elaborate and fantastic, not to say ridiculous; the splendid opportunity for having one set of names for all countries has thus been frustrated.

Chapter VI.—Desserts.

As stated before, desserts are elaborate sundaes, and cost more to serve, and should be charged higher than the ordinary sundae. It is impossible to give here more than a few basic recipes; the trader will not lack imagination should he wish to concoct more names and more recipes to suit his own environment. Remember, however, that it is not successful just to add flavour upon flavour indiscriminately when serving a dessert sundae, or fruit on fruit; some flavours go well with others, some do not. Strawberry, for instance, is best served with currant, not with raspberry; and the colour effects should not be forgotten. Again, let me advise traders to serve a glass of cold fresh water with each ice and a wafer or two with the ices that do not have them in the " service."

Banana Split.

Slice a banana lengthwise in two and place each slice on the side of a measure of ice cream on a banana split dish, generally made of silver, nickel, aluminium or other " plate," about 9 in. long and 3 in. wide. Top with Maraschino cherries and cherry syrup. The success of this dessert is really tremendous, and it is to be met with in every soda fountain bar or ice cream shop worthy of the name.

Banana Nut Split.

Split a banana as above, in the centre pour some whipped cream, and at each end a small measure of ice cream (there are some 30 or 24 to the qt. dishers on the market). Pour chopped mixed nuts on one ice, chopped mixed fruits on the other. Place a Maraschino cherry on the whipped cream, and decorate slices of citron around the cherry.

Three Twins.

Long strips of a banana on a banana split dish, vanilla ice cream in the centre, chocolate ice cream at one end and strawberry ice cream at the other. Between the ices pour a little whipped cream, and top each ice with banana slices and a cherry. Place a wafer at each end and serve.

Lavender Lady.

Slice a banana lengthwise and place on a banana dish. Chocolate and vanilla ice cream at one end, strawberry and vanilla at the other end. Pour lavender dressing over the ices, and top with cherries. Lavender dressing is one of the many (too many !) " toppings " used in the States, and is made from ½ pint marshmallow paste, 2 ounces raspberry syrup, a dash of grape juice, 1 oz. shredded coconut, and enough simple syrup (sugar and water) to thicken it.

Dream Maid.

Cut a banana crossways into rings and place over the bottom of a saucer, add ice cream, finely ground nuts, a Maraschino cherry, and sweetened whipped cream.

Football Dessert.

Long strips of a banana on a long dish, a round ball of chocolate ice cream (two ordinary measures pressed together with a silver spoon will do), make a few dents across the ice cream to represent a football, and decorate with chopped nuts, chocolate syrup, whipped cream, red cherries, and a wafer at each end.

Aviation Glide.

Generally put on when there is much talk of air races, records, etc. On a banana dish place a halved banana, flat sides upmost, and vanilla ice cream in the centre, chocolate at one end and strawberry at the other. Stick the points of two wafers in each side of the chocolate ice cream to represent the forward end of the airship, and another wafer in the strawberry to represent the tail piece. You should also top the chocolate with a cherry for the aviator himself. Decorate with crushed cherries and pineapple between the ices, and over each ice pour chopped pecan nuts and whipped cream (or marshmallow, which generally substitutes it).

Comet.

A ball of ice cream and two halves of a banana " shooting " from it to represent a comet's head and tail. Decorate with crushed strawberries, marshmallow cream, and a cherry on a toothpick.

Delmonico Special.

(Delmonico's Restaurant was the most famous in New York till Prohibition closed it, with many others that relied on alcoholic refreshments for the larger bulk of their income. This particular restaurant was so famous for its service that even the best ice cream recipe from the States was called "Delmonico ice cream.") A measure of ice cream at each end of a long dish and four strips of a banana that meet in the centre of the dish, with one of the ices between each opening of the two V's thus formed. Fill the four empty spaces with four slices of an orange. Decorate with a ladle of cherry wine syrup, sprinkle with a few nuts, and top each ice with whipped cream and a cherry. This used to sell for 20 cents (10d.) before the war in most of the American soda parlours.

Honduras Chocolate.

Two slices of a banana, with plenty of chocolate ice cream between them, whipped cream, a few strawberries and grated chocolate to give the right colour and flavour.

Watermelon Royal.

A nice slice of ripe watermelon without seeds, pineapple water ice (or ice cream) at one end, orange at the other, strawberry syrup over the lot and a Maraschino cherry on each ice.

Atlanta Watermelon.

Two or three cubes of watermelon, about 1½ inches in size, in the centre of the dish, vanilla ice cream on one side, strawberry on the other. Decorate with strawberry fruit over the vanilla, pineapple fruit over the strawberry and walnuts, and whipped cream over the watermelon cubes, which may be separated from the ice cream by means of ice wafers. Top with green and red cherries.

Peach Supreme.

Pare and halve a peach, remove the stone, sprinkle the halves with powdered sugar, and place them on both sides of a measure of ice cream. Decorate with a ladle of fresh

sliced peaches and syrup, walnuts broken into small pieces, whipped cream and a cherry.

Peach à la Reine.

Vanilla ice cream, marshmallow or whipped cream, sliced peaches round the base of the ice cream, sprinkle coconut strips over the lot, and top with a Maraschino cherry.

Honolulu Pineapple.

Drop a measure of vanilla ice cream in a tall glass, and in it place, point upwards, eight triangular pieces cut from a sound slice of pineapple. Over this pour chopped walnuts and a little grape syrup, some whipped cream (or marshmallow), and a red cherry. Then place the glass on a nice wide saucer or plate, with one wafer at each side of the glass.

Orange Melba.

This wants careful handling at first to obtain an attractive result. Get a nice ripe orange and peel it downwards in sections, allowing the strips of the peel to remain adhering to the bottom. Carefully split the fruit into slices without breaking it, otherwise the juice will run and spoil the effect, while still holding the orange in your hand. In the hollowed top place a measure of ice cream, and place the orange on the dish. Over the ice cream pour a little nectar syrup, a little flaked coconut, and top with a cherry. Very attractive and novel, and a good summer line.

Cake and Biscuit Desserts.

Pineapple Bon-Bon.

On a plain white saucer place a round slice of pineapple, and on this a measure of ice cream. Around the ice cream place three sponge fingers, the smaller the better, and over the lot pour crushed pineapple, with plenty of sweet, thick juice, and top with a cherry.

Nut Charlotte Russe.

Make a square with four halves of sponge fingers on a saucer, and in the centre place a measure of Charlotte russe. Over this pour pink-coloured whipped cream or marshmallow, and top with a cherry. Charlotte russe is

made thus: 1 quart heavy cream, 6 ozs. powdered sugar, Vanilla flavour, two teaspoonfuls of ice cream powder, and 6 ozs. of chopped nuts. Whip the cream, sugar, flavour and powder until it is stiff, then add the nuts, and whip until it all stands.

Lady Finger Dessert.

Get a paper ice cream cup or case, and around the inside stand four sponge biscuits. Fill the centre with strawberry ice cream, and top with a cherry. Place the cup on a saucer or plate.

French Glacé Fruit.

This is a very attractive dessert. On a long dish place three slices of sponge cake or three sponge fingers, with a measure of ice cream on each. On the centre ice pour whipped cream and sprinkle a few chopped pecans; on the other ices pour crushed pineapple and strawberry respectively. Top a Maraschino cherry on each ice. On one side of the dish place a small slice of pineapple and mixed glacé fruits.

Ice Cream Charlotte.

Place two halves of a sponge biscuit in an empty Charlotte russe cup, on their ends, and fill up as follows:—Vanilla or bisque ice cream, Charlotte dressing, and a cherry on the top.

The dressing is made with 1 quart whipped cream, ½ oz. gelatine dissolved in hot water, one egg yolk well beaten, 1 oz. pulverised sugar, 1 oz. sherry wine. This, and all other dressings, should be kept cool to prevent deterioration.

SECTION II.—WHOLESALE ICE CREAM.

One can hardly mention the tremendous figures achieved by the wholesale ice cream trade in the States (and likely to be reached here) without remembering that it was the knowledge of the food values of the ingredients used and of the *best way to use them* that allowed this great success. In view of this it is desirable to give readers a few particulars, especially of fat, casein, binders, etc., which play such an important part in the trade. The time has gone when gallons of cream, sugar and large quantities of other necessary items were shot into large boilers and then passed through freezers with no other qualification than that "they were good." The present success of the trade depends on percentages, traces, hairbreadth finenesses of the constituent parts of the milk, cream, condensed milk, sugar, gelatine, etc., used, not to say anything about freezing, packing, holding, increase in "swell" while freezing, etc.

Chapter VII.—Milk, Cream and Other Ingredients.

MILK.

Milk is the yellowish-white liquid secreted by mammals in the breasts, and is not only nourishing for the offspring for whom it is intended, but also for adults. Wild animals give out very little milk, but domesticated animals, such as cows, give a large amount in comparison, and science never fails to obtain better results still. In fact, were it not for improved "output" such large industries as the cheese, butter, condensed milk and ice cream could never have grown in the States.

What interests us most is the analysis of cow's milk. An American professor made 280,000 analyses of cows' milk during 17 years in England, and came to the following *averages:—*

Water, 87·35 per cent.
Fat, 3·74 per cent.
Milk sugar, 4·70 per cent.
Casein, 3·00 per cent.
Albumin, 0·40 per cent.
Ash, 0·75 per cent.
Minor constituents, 0·60 per cent.

The above figures should be carefully remembered by the trader who intends studying the trade for pleasure, or, what is more important, for profit.

In the study of milk there are lots of things that do not interest us very much for the present, such as reindeer's milk having less water than any other animal's, while the milk of the ass has most; that cow's milk can fluctuate from 80 to 90 per cent. water, 2 to 6 per cent. fat, and so on, that the fat of milk is made up of many chemicals known as glycerides (*i.e.*, glycerine and acids), olien, palmitin, stearin, myristin, butin, butyrin, caproin, caprylin and caprinin. But there are also some very important points, such as the *serum*, *i.e.*, that part of the milk which is not water nor fat. This serum also is made up of chemicals and gasses, and is the part of the milk that sours first, not the fat as is generally believed, a very important matter for large users.

Here are a few condensed items about milk which the trader will find useful without losing patience over long discussions over same. Fat globules in milk measure only 1-300th of a millimetre in diameter, *i.e.*, it would take about 7,500 of these globules to go across 1 in.; a cow gives about 136 million of these globules every second when being milked; cream contains 1,094 calories to the lb.; the specific gravity of milk is 1,032, *i.e.*, about 3 per cent. heavier than water; one gallon weighs 10 lbs. 5 ozs.; 1 lb. of milk contains 325 calories; it freezes at the same temperature (actually 0·55 deg. lower) than water; its specific heat is 0·920 (water is 1·000); skim milk, 0·940; light cream, 0·723; heavy cream, 0·560; butter, 0·512; Jersey cows give milk containing only 84 per cent. water; after being milked for

three months a cow gives milk containing less water; the age of a cow does not affect the quality of its milk; cows have been known to give more fat in the morning than the evening; sometimes the last part of the milking is better than the first; one udder gives different milk from another, and one half of the udder never gives the same quality in fat as the other half!

What is more important to us is the food value and quality of milk. As the latter comprises the former generally we will remember that our ultimate success depends on the many operations that go to give us a clean milk, especially as it ferments quicker than any other food.

The National Pure Milk Society had done a lot in Britain to interest the public and farmers in a cleaner milk supply, and a few of their requests to farmers are worth appending here.

Milk is always pure and clean until it leaves the cow's body (excepting consumptive cows, of course), and to prevent contamination from the milking to its sale to the consumers the following methods should be adopted: Cows kept in stables should be brushed daily and all long hairs from udders, flanks, tail, etc., should be clipped short; the straw or other bedding should be clean and dry; operations that cause dust, such as grooming, bedding or feeding, should not immediately precede milking; manure should be removed twice daily to a place far removed from the stables; nothing likely to spoil the flavour of the milk (such as onions, turnips, etc.) should be stored in the stable, neither should cows pasture near these plants just before milking; all beams, shelves or other articles likely to gather dust should be removed; the flooring should be of concrete or other material likely to prevent unnecessary mud, wet, dirt, etc., the ventilation should be good and not allow any smell in the stable; the light should be such that there are no dark corners (about 4 square feet of window per cow); the stable should be away from the milk house; the milk house should be easily washed and flushed with a hose pipe, should have no square corners in which dirt or dust can accumulate, and should have ventilators and sufficient water taps; all utensils should be of one piece or perfectly soldered, so that stray drops of milk cannot sour and cause bacteria

to grow; utensils should be first washed in cold water to prevent the "film" sticking to the sides, then in hot water and washing powder, well scrubbed, and then steamed and sterilised at 145 deg. for 20 minutes, and allowed to dry by their own heat without touching with cloths, dusters or towels; straining cloths should be washed in the same manner as the utensils and boiled for five minutes before hanging up to dry; no person suffering from any illness or complaint, or from a house where there is any invalid, etc., to be allowed in the stable or milk house; each employee to be dressed in clean overalls; all milking stools and other articles likely to be touched by the employee's hands to be clean and sterilised repeatedly; milking pails to have suitable lids which allow only sufficient space for the milk to enter the pail; all hands to be repeatedly washed and kept dry, this being also better for the cow's teats; as soon as the milking is finished the milk should be lowered in temperature to at least 50 degrees, so as to prevent microbes and bacteria growing; every precaution should be taken to ensure the milk being kept cool and protected till it reaches the consumer; small churns of 5, 7½, and 10 gallons are the best for all practical purposes; the best method is to pasteurise the milk and fill it into clean, sterilised bottles straightaway, sealing the bottles immediately, as this ensures the milk remaining good for a few days if kept cool; milk should be graded into three classes or qualities: first, for infants and children, containing not more than 30,000 bacteria per cubic centimetre (eighteen drops), and sold only in bottles; second as No. 1, but allowing 100,000 bacteria per c.c.; No. 3, for cooking or manufacturing purposes only, 300,000 bacteria per c.c.

A few attempts have been made over here to get this standard of quality introduced and enforced, but, as usual, things move slowly, although it is calculated that the increased expense to obtain all this will only mean about ½d. per quart on the present price of milk. It is calculated in America that pasteurisation destroys 99 per cent. of the microbes, and only costs ½d. per 3 gallons, and this only means holding the milk at 145 degrees for thirty minutes, which does not destroy the casein and other food values of the milk, whereas higher temperatures do.

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CREAM.

Cream is the principal ingredient in American ice cream, and is being used more over here, too. It has been the study of cream that has added most to the knowledge of American ice cream manufacturers as regards swell, souring, necessary ingredients, "sandy" ice cream, profits, etc.

Cream, as fat floating on milk, contains the following average figures, the highest being the "heavy" cream, the lowest light cream:—

	Highest in fat.	Lowest in fat.
Fat	67.5 ...	15.2
Casein / Albumen	1.2 ...	3.1
Sugar	2.2 ...	4.5
Ash	0.1 ...	0.6
Water	29.0 ...	76.6

Dairies will, however, serve manufacturers with any percentage of cream, and the general sale is that of 40 or 30 per cent. cream, *i.e.*, cream containing that percentage of fat. It is recognised that a 25 per cent. cream is the best for ice cream making, especially when the cream has been "held" for twenty-four hours, during which its viscosity or stickiness or thickness has increased, and allows the freezer to whip it up better. Fresh cream is always thin and slushy, and no one in America would dream of using it without storing it first for twenty-four hours in the cold storage room.

As it was discovered that fresh milk had many disadvantages when used in large quantities in wholesale plants (heavy cost of transport, danger of souring, over three-fourths of it being water and unnecessary to the trade at the price, and so on), so also was cream discovered to have certain disadvantages. The traders quickly set to work to get at the bottom of what was useful and what was not, and came to the following conclusions, which I will append in a practical form.

A 25 per cent. cream, costing, say, 20s. per gallon, contains the same flavour and contents (fat, water, albumen, etc.), and is *in every way* similar for our purposes to a little butter containing 84 per cent. fat, milk powder containing 98 per cent. milk solids and only 2 per cent. moisture, and sufficient water to dilute the whole and make it all resemble cream. Calculating the cost of these three ingredients, it was found to be *much less* than the price of fresh cream and milk used in the factory. Result: More use of butter and powdered milk, and less of the costly fresh cream and milk.

In the above paragraph you have the whole secret of the transformation of the American trade into what it is now.

Eventually, a machine called the emulsifier was placed on the market to mix, pasteurise, and " emulse " or smooth the ingredients. This machine, which is not at all costly, improved the " emulsified cream " very much, and its success is such that every factory worthy of the name has such a machine. Its operation is simple. The water, butter and milk powder are placed in the centre tank and the gas lighted under the outer or " water jacket " tank. Then the motor is started to agitate the contents so that they mix thoroughly. This goes on until the thermometer shows that the contents have been held at 140 degrees (not more) for twenty minutes, so that all the microbes have been destroyed by heat without damaging the food constituents of the ingredients.

Then the belt is connected with the small brine tank and actual emulsifier. The first allows the cold brine (salty iced water) to flow through the inside of cooling rollers over which the cream or milk will eventually pour. The second agitates the vacuum rod through which, at a pressure of 400 lbs. to the square inch, and with 20,000 revolutions per minute, each drop of the cream is forced through the emulsifier and out to the cooling rollers. Only those who have seen the butter, milk powder, and water go into the machine and the cold cream come out, smooth and fine, can appreciate the usefulness of the machine.

Milk can also be made at a reduced rate by passing milk powder and water through the machine.

Ice cream manufacturers may put all their ingredients in the machine and then in the freezers.

Herewith a few recipes which are generally used with this machine:—

9·6 % Fat Ice Cream with 33 % Total Milk Solids.

Unsalted butter	2 lbs.	14 ozs.
Skim milk powder	2 lbs.	10 ozs.
Water	16 lbs.	2 ozs.
Sugar	3 lbs.	0 ozs.
Gelatine	0 lbs.	3 ozs.
Flavour		

Readers will notice that pounds and ounces are used instead of gallons and pints. This is the latest American innovation in the trade.

8·7 Per Cent. Fat Ice Cream.

This also contains 33 per cent. milk solids, *i.e.*, the food part of the milk, as used now all over the States as a guarantee of the food value of the ice cream. The butter fat content of butter is 84 per cent., *i.e.*, about 8 times too much when ice cream is concerned. Hence the necessity for the breaking down with ingredients containing less fat.

Unsalted butter	2 lbs.	6 ozs.
Skim milk powder	3 lbs.	5 ozs.
Water	16 lbs.	2 ozs.
Sugar	3 lbs.	0 ozs.
Gelatine	0 lbs.	2½ ozs.

14 Per Cent. Fat Ice Cream.

(Total milk solids 33 per cent.)

Unsalted butter	4 lbs.	1 oz.
Skim milk powder	2 lbs.	1 oz.
Water	15 lbs.	0 oz.
Sugar	3 lbs.	0 oz.
Gelatine	0 lbs.	2½ ozs.

The above three recipes may be regarded as perfect, but, even so, the trader should consider them as basic recipes and make others from them.

Other Ingredients.

The best known sweetener for ice cream is sugar, which either comes from the West Indian sugar canes or from

beetroots. Having a very high food value (1,823 calories to the pound), its use is a credit to us. Other sweeteners are honey, glucose, corn syrup, maple syrup, saccharine, etc., but these are not to be compared with sugar for all-round efficiency.

In America it is customary to invert sugar into dextrose and levulose as the human stomach does. This operation, however, is not done to save the customer's organs, but for extra profit. In fact, 100 lbs. of sugar, 44 lbs. of water and 50 grains of tartaric acid, all boiled for *not more* than 30 minutes, produce an article that sweetens ice cream better, and saves 4d. in the 1s. It is claimed to be a smoother sweetener than sugar. However, if you stick to sugar you will not be far wrong; and, personally, I have never found lumps of sugar in ice cream. When it comes to a discussion on a " smoother " sweetener, the economic claim is, of course, unassailable.

Always endeavour to maintain the sugar at about 12 per cent. of the total ingredients used (the recipes used in these articles will be found quite safe), otherwise, apart from losing money on an overdose of sugar you will also lose money on extra ice and salt *and time* required to freeze cream containing too much sugar.

Gelatine, the most used stabiliser or " thickener " in the trade, is a better made glue, and, if the best is purchased, is free from arsenic and other undesirable chemicals. It is made from the hoofs, horns, bones, hides and skins of animals, and generally sold in sheets, flakes or powder form. Gelatine should be soaked overnight in cold water, then in hot (but *not boiling*) water, until no lumps remain, and then incorporated with the warm mix or custard, either in the emulsifier or saucepan containing the already prepared mix. If you allow gelatine to boil it will give out a very nauseating smell and spoil all your ice cream. This happens also when it has been left standing for a day or two. If you pour the warm gelatine into a cold mix it will turn into one or more lumps, thus being of no use to you, as it will not stabilise the whole of the mix. When you use hot water for gelatine never let it be hotter than 165 degs. If you use hot milk 145 deg. is the limit to prevent nasty flavours. Do not use any water if you are placing the gelatine in the emulsifier, otherwise 10 ozs. to 1 of gelatine is enough. Gum tragacanth is gradually becoming extensively used, being very pure. It is made from a plant called astragalus. One ounce of this gum is allowed to soak for 24 hours in 2 qts. of water, and is strained into the ice cream. Most traders make a stock of this gum thus: 4 ozs. gum, 8 qts. water, 16 lbs. sugar. Sugar acts as a preservative. Care should be taken to calculate the actual amount of gum, water and sugar you are adding to the mix, especially when you wish to be precise as to butter fat contents, milk solids, etc., you are giving your customers.

Other binders are Irish and Iceland moss, with no food value; eggs, quite a good ingredient, and a slight thickener; starch, rice, arrowroot, cornflour, wheat flour, rennet, and ice cream powders containing rennet, arrowroot, sugar, etc.

Vanilla is the most used flavouring in the ice cream trade; in fact, it is generally used even when other flavours, such as chocolate or strawberry, have to be the conspicuous flavour of the ice. The history of this flavour, from plant to factory, is very interesting, but suffice it to say here that *Vanilla planifolia* is not only the only useful orchid out of the 17,000 that are known to exist, but also out of fifty vanilla plants that go to form the previous number! When the pods are ripe the beans or stalks are dried, cured, and packed into bundles of ½ lb. or so, each stalk about 6 inches long. The oldest method of using vanilla is to slit a stalk lengthwise and boil it with the milk. However, the evaporation from this method must be quite an item in the loss account of a large manufacturer, so perhaps it is better after all to add vanilla flavouring in the form of a liquid extract in the freezer, just before freezing.

Ice is merely frozen water, obtained either from the frozen lakes in Norway or from ice factories. Apart from the controversy as to which is the purer, no time need be wasted here over ice, as nearly everyone knows, in an elementary manner, how it is made in ice factories.

Care should always be taken to ensure, as much as possible, that the quality, freshness, and value of each ingredient used in the manufacture of ice cream are absolutely the best. If you do not care to do this from a hygienic point of view, do it for your pocket's sake!

Chapter VIII.—Machinery for Wholesale.

A small wholesale factory requires nothing more than is used in a large retail factory; in fact, many retailers have started serving other shops without purchasing any machinery, tubs, containers or anything. But it is advisable to state a few of the many practical machines and articles that a successful wholesaler should have in his factory.

Needless to say, everything used, or the manner in which it is placed or fixed, should be such that an increase in the plant to cope with increased trade will not throw the running of the factory into chaos. Neither should mistakes be made in the laying out of the factory, such as placing the freezer or freezers near the fire or gas boiler, or near the washing plant containing hot water. Apart from spoiling the effect of the *cold* freezer and the *hot* water, such mistakes are very bad for the employees, who have the right to work for their living without having to pay for doctors' bills or causing an epidemic of colds and influenza in the factory.

The ice box is better near the freezer than the fire or the water tank, and every effort should be made to save that eternal running across the room every minute or so to get this or that. Ice and salt should be near the freezer, not at the other end of the room. These points should be sufficient for the average trader to understand the value of "the right thing in the right place."

When ordering the entire plant or sets of machines for your large retail or small wholesale factory start from the beginning, and make use of the word *why* as much as you can. At school we were all taught that the word *no* is the most difficult in our language; in fact, it takes a strong brain to throw the word out instead of temporising, hesitating, and so on. And when buying machinery that has to be not only paid for but kept, seen to, studied, praised or cursed, according to the results you obtain from it, study each point, and ask the traveller *why* his machine is better

than the other man's, *why* he claims this record for it, and so on. You have every right to do so, and, incidentally, you may learn a lot about the trade and its machinery. Remember you are in business for profit and comfort, not as a health cure.

Will you buy your cream and milk from the farmer or wholesale dairy or make your own from butter, milk powder and water? Will you invest in a special holder for your fresh cream or make your own in an emulsifier? Will you make the old-fashioned Italian ice cream (really a milk ice) or the American, which is gradually ousting the former? Just boil it in large quantities, allow it to cool, and then freeze it in British freezers or in the American brine freezers, which are really made for whipping cream and not milk? You see, there are dozens and dozens of questions you can, and should, ask yourself before opening your cheque-book. Once your machinery is erected and paid for you will have to stand years of philosophic regrets at any mistakes you may have made. But enough of this despondent outlook; what matters is that there is a small fortune in wholesale ice-cream making, and you are advised to start before others do.

My advice is to picture a large room, clean, well ventilated, etc., and likely to impress yourself, your employees and the public at large with a feeling of cleanliness and a desire to eat the dairy goods manufactured in it. (We often forget that ice cream is a dairy product, with the finest claim any foodstuff could have, and not a concoction of cornflour and colour as some have been led to think owing to the carelessness used in the past.)

At one end I would have all the plant necessary for the boiling of any ingredients that have to be boiled and the steam or hot-water apparatus for washing containers, towels, utensils, etc. At the other I would have the ice and salt boxes, the freezers, shelves to store the unfrozen mix, fruits, flavours, etc., the space between being taken up by containers, tubs, utensils, and so on. Larger factories would naturally have special floors or rooms for each operation, as they would also have stables for horses, a garage for the delivery motors, etc. The principal thing is to erect each machine in its best place, save trouble and time and expense, and be able to run things smoothly.

Here is a description of a new wholesale factory in London, not large, but very effective. On the ground that the space was too small for easy running, they took a large room on the first floor of their large building and installed a homogenizer, which, like the emulsifier, makes cream from butter, milk powder and water, but is a much heavier machine, provided with valve pumps. These pumps cause the materials to be forced through a very minute opening against a hard metal, literally smashing each drop of it into the atoms of which it is composed. This machine makes the smoothest possible ice cream mix—in fact, most factories pour all the mix (excepting fruits) into it; the cream made from it cannot be re-churned into butter. However, this will not affect ice cream manufacturers.

From this homogenizing machine the mix is pumped through large tubes into the ageing vat, where it stands and matures, or ripens and regains the viscosity ("stickiness" or "thickness") necessary to produce a profitable swell in the freezers. From this ageing or ripening vat it is then pumped, as required, downstairs into three horizontal American freezers. This type of freezer, like the upright style, has a closed metal tub all round the container to hold the brine, and freezes much more quickly than we do with our ice and salt method. The brine comes from the brine box, not necessarily a large one, generally at the side of the freezers, and is nothing more than melted ice and salt, pumped through one metal hose or tube into the freezer and drawn back into the box, where it meets more ice and salt, gets colder, and is again pumped into the freezer.

Where it takes us from twenty to forty minutes to freeze our ice cream with ice and salt, it only takes these freezers twelve or fifteen minutes for the ice cream to reach its maximum swell or bulk (generally at 27 deg. Fahr.). It is then removed from the freezer by opening a lever at the bottom; the ice cream comes out like thick condensed milk and drops into another container, held under the freezer, which is then placed in the ice box or cold room with a very low temperature for about twenty-four hours. It there gets very hard and ripens into one flavour, as previously described, and is ready for sale. The washing plant, and

a very up-to-date one at that, is upstairs, away from the freezers, brine box and the ice-crushing machine.

Compared with the British freezers, the outstanding feature of the American type is the whipping device or dasher, more elaborate than ours—*i.e.*, provided with more side blades—and made to revolve at anything from 120 to 200 revolutions per minute. This is necessary to whip up the ice cream to its maximum swell and smoothness, but were we to use it with an ordinary milk ice recipe the result would be a very weak-flavoured and insipid ice cream. This is overcome by adding more sugar, flavour and fat (cream, condensed milk, etc.), and getting the same taste result. I have known traders to remove some of the blades from a central beater or whipping device when they have added one of these to the ordinary side knives or scrapers, because the ice cream lost some of its flavour or taste by being whipped up too much.

Herewith a few hints, useful for those using cream in wholesale (emulsified cream should be made to approach it as much as possible). Cream should be pure and fresh, and you should have a guarantee to this effect and for the butter-fat content. The richer the cream the better it will whip up, satisfy your customers and improve your profits. To obtain the best results you should store it for twenty-four hours in a cold room. The more it ages the better it will whip up. Cream containing from 0.16 per cent. to 0.20 per cent. (not more) of acidity whips up better than fresh cream, but no sour taste should be discernible. To correct this fault, to every gallon of cream tasting too acid add 5 or 6 gallons of fresh cream. The next best corrective is a little baking soda, but great care should be taken not to spoil it. Another sweetener is ½ teaspoonful of salt to the gallon; in fact, this addition of salt is recommended wherever milk or cream is used. It actually improves the flavour.

Thick cream requires less gelatine or any other binder, and in general use we should not use a cream containing less than 20 per cent. butter-fat if we want easy freezing and good results. Freezing is a very important, probably the most important, item in the making of a good ice cream. Even the thickest and best of cream will make a very coarse, grainy and unpalatable ice cream. It is the proper blend of ingredients and perfect freezing that produce the smooth, velvety article your customers will want again.

Remember that the freezers must be cold, clean and ready, the brine box filled with very cold brine (they use it as low as zero in the States), and your mix far from warm, otherwise you will have small pieces of ice in your finished product. Pour the mix into the freezers, taking care that you are not putting too much in. A 40-quart freezer means a freezer the maximum capacity of the inside container of which is 40 quarts. You must make allowances for the space taken up by the dashers and for the swell to be obtained by the freezing and whipping. If you put more than 15 or 20 quarts of mix into a 40-quart freezer you will upset some calculation or other; hence the advisability and necessity of ordering freezers that are large enough. (American quarts are one-fifth less than ours.)

The swell is produced by the freezing of the water in the milk or cream into crystals, interspersed with air bubbles. The better the whipping the more and finer the air bubbles. All these prevent a coarse texture or body likely to be produced by the water content of the mix.

As the brine is pumped round the container, the ice cream inside gets colder and colder, better mixed up and whipped. The side scrapers send the outside (or colder) portions towards the centre; the centre beaters or dashers whip it up and send it to the sides again. After about 12 minutes, according to the rate of beating, the temperature of the brine, and the chemical condition of the ingredients (serum solids, butter-fat, gelatine, sugar, etc.), the ice cream has reached 27 deg. Fahr. and is frozen, and has reached its maximum swell and should be removed at once, otherwise the air already whipped into it will be actually whipped out, and money and time will be lost in keeping the freezer and motor running, as the ice cream will not and cannot be improved.

As already explained, by turning a lever at the bottom of the freezer the ice cream is allowed to pour out into another container, which also should be as cold as possible. The fact that the ice cream is no thicker than condensed milk does not mean that the freezing is incomplete. It only means that the hardening remains to be done; and this is best done without touching the ice cream any further —*i.e.*, by leaving the container for twelve or twenty-four hours in the hardening box, packed with ice and plenty of salt, or in a cold room attached to an ammonia plant, where the temperature is about zero. Ice cream tastes better when it has stood for about twenty-four hours.

Lately one or two firms started placing on the British market a complete plant for freezing ice cream with an American type freezer and an insulated hardening box, where the temperature was guaranteed at zero. This box is made in separate compartments, so that one-half may be used for containers, the other for ice cream bricks. Another firm has one with the box in the form of a tall cupboard against the wall instead of the long shape, and it looks more like a wardrobe, each of the four half-doors allowing one to take out containers or shelves with ice cream bricks without disturbing the temperature of the other three compartments. As a rule, the heavy containers are kept in the two bottom compartments, the bricks in the higher. For about £500 one can look forward to a complete plant, which not only runs smoothly with very little cost (about £1 per week), but also makes a few blocks of ice for the trader to pack his tubs with when serving other shops. I firmly believe that the mechanical side of the trade will see still more improvements. Our trade has not awakened competition amongst refrigerating engineers yet, but all will come in good time.

In a large wholesale plant you would find a battery of freezers running down the whole side of a long wall, each freezer fed from a large brine tube just as small water-pipes or gas-pipes are fed from the mains. The colder the brine the better and quicker the freezing, provided, of course, that the dashers do their work properly. It would be disastrous for the ice cream were the dashers to remain stationary or revolve slowly; the result would be a very coarse and grainy ice cream, not to mention a loss in swell.

An American wholesale factory (not the largest) has the following lay-out: In the basement there are the personal rooms for the 100 employees, including shower baths, separate lockers for each assistant, so that they can remove their outdoor clothes on entering and don their white uniforms and overalls. There are also the ice store, ice-crushing machines, salt store, tub depôt and can-washing machine—a long affair provided with endless chain arrangements, which marshals the containers or cans one after the other through a large tank containing hot water, soda, disinfectant and brushes, all of which scour the cans properly, then through another tank containing clean water, and, finally, through an oven, where the heat is sufficient to dry the cans without the necessity for an employee to do so or the possibility of them rusting. We must agree that all these are not a bad lay-out for a basement.

On the ground floor are two long loading platforms, one for local deliveries and one for country orders, similar to those we see at our wholesale milk contractors, delivery yards, etc. As each is 100 ft. long one can imagine the number of motors that can be loaded quickly therefrom. On the same floor there are the milk and cream stores, the freezing rooms, the brick-making and cutting rooms, the special orders (fancy shapes, etc.), and shipping (railway) departments. Particular attention was paid by the owner to perfecting and simplifying the brick-making machinery; he now employs his own patent machines that make as many as four flavours without the touch of human hands.

It can be arranged to make from one to four flavours at the rate of 12 gallons per minute, or 20 gallons plain (one flavour) per minute. Even the size of the bricks can be altered, as can the position of colours or flavours, and it is remarkable that the lines of demarcation are perfectly straight and even, much better than could be made by hand.

Another patent machine used is the tub packer. This machine can pack 100 tubs with ice and salt per hour, and allows the percentage of ice or salt to be changed by the mere touch of a lever, and only requires one man to do all this instead of at least one dozen under the old system. And yet twenty-nine years ago the owner of this factory was a mere cigar retailer, who, out of sheer slackness of trade one summer was tempted to try and sell ice cream. A friend lent him a small hand freezer, and he tried to freeze some home-made custard, but after two hours the ice cream was still a soft custard. He did not know that salt was necessary to get a low temperature! Eventually, he arranged with a laundry next door to allow him to bore a hole through the dividing wall, so that he could run a rope from the laundry machine to the crank of his freezer! That was his first step twenty-nine years ago. He now owns the factory described above, 200 ft. long and 200 ft. wide, and over the road he has a garage, stables and a repair shop.

What has been called the finest ice cream factory in the world is in Allerton, Pennsylvania. It took four months to erect, which is slightly more than the average, as things are done very quickly over there once the contracts are made and the order is given. It is 190 ft. by 160 ft., three stories high, and, not counting the basement, cabinet shop and two-stories garage, has a floor-space of 65,000 ft. Contracts included the digging up of 5,400 square yards of earth and supplying 421 carloads of materials, totalling altogether 15,000 tons. There were 366 carloads of cement, stone, sand, bricks and putty, 20 tons of terracotta, 100 of steel, 12 of steel sash, 10 of glass and putty, 30 of iron, 30,000 square ft. of roofing surface, with 70 tons of material, 175 tons of material for the heating system, 12 carloads of insulating cork, 4 of electrical material, including 10 miles of wire, 9 carloads of refrigerating machinery, 8 carloads of glass-lined tanks for milk, etc., 3 carloads of ice cream equipment, and 5,200 panes of glass, totalling 12,000 square ft. This plant makes 6,250 gallons of ice cream and 75 tons of ice per day, can store 6,000 tons of ice, and the hardening rooms can store 25,000 gallons of ice cream. That is to say, there is space for 5,000 containers of 20 quarts each, which is the average size.

There are only four freezers in this factory, but of 120 quarts each. That means that every ten minutes about 400 quarts are turned out. After this is hardened for twenty-four hours it is distributed all over the county by means of sixty-three motor lorries and twenty-one wagons. The firm has fifty-two horses, one-half out in the day deliveries and the other half at night.

This is the lay-out—Basement: Rough storage. Ground floor: Engines, compressor, can-washing, sterilising and milk-receiving rooms, and the loading platforms. First floor: Ice cream freezers, fruit stores, etc. Second floor: Offices, laboratory, ingredient mixing rooms, ice tanks and storage rooms. Third floor: Milk and cream rooms, evaporators and stores. Roof: Ammonia condensers, water tanks and cooling tower.

The system adopted is similar to that used in many plants—*i.e.*, the ingredients pass upwards to the roof for certain processes, and then downwards (the so-called gravity system), to be finished and delivered to the customers. This saves time and money and that eternal criss-cross running about I have criticised previously. The milk, cream, fruit, etc., are received from the plant's own dairies at the platforms and taken to the laboratory rooms to be inspected, approved and then weighed in the special weighing vats. From these vats it is pumped into six glass-lined tanks of 2,000 gallons capacity each, and subsequently to sugar-adding vats. The next step is to pass through the evaporator, a vacuum boiler that prevents any boiled taste in the finished product; then again into glass-lined tanks and through the pasteuriser tanks, each of 500 gallons, and finally through the homogenizer, capacity 800 gallons per hour, pressure 1½ tons. Leaving this machine at a temperature of 135 deg., it is pumped over a surface cooler till it goes down to 40 deg. This last operation is done in a glass-enclosed room to prevent dust, dirt, or bacteria or even smells getting into the milk or cream while it is being held in the 2,000 gallon tanks. Then comes the freezing.

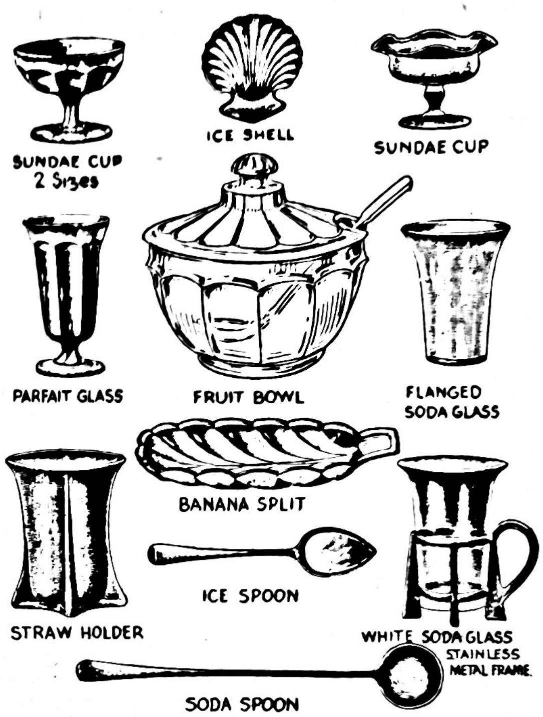
This plant has started the hopper system of transferring the ice cream from the freezers to the hardening containers. This is possible where there is a floor underneath the freezing-room. To every two freezers there is a hopper (something like a wide funnel), glass lined and kept cold by being in contact with the brine system. The end of the funnel is in the floor beneath, and is connected with a holder, also kept very cold. The man underneath is ready with his cold containers to collect this ice cream, knowing, of course, that every ten minutes a certain amount will come down the hopper. While he sees to his hoppers, the freezing men upstairs can direct all their attention to operating the freezers and nothing else.

There were over 1,000 new wholesale factories in the States in 1921, and the present total is about 5,000. Many of the breweries closed under the Prohibition Laws turned into ice cream factories and made good. Some are

far from being very large, but there are others with a capital of from one to six million dollars. One in Philadelphia turns out 4,500,000 gallons per annum, with an average of 120,000 quarts per day, one-eighth of which is delivered into New York. In all they serve 500 small and large towns, the minimum to each retailer being 100 quarts per week, so that stragglers may not have any left and spoil the demand for Breyer's ice cream. They use 300 tons of ice and 100 tons of salt per day for packing up the delivery tubs. All the ice cream is frozen by brine. This firm owns all the creameries and dairies from which it obtains the bulk of its ingredients, and contracts very largely with others; uses 400 barrels of sugar per week, 450 lbs. of vanilla pods, 500 boxes of oranges for the water ice, 9,400 lbs. of chocolate, and in season 60,000 lbs. of strawberries and 2,200 bushels of peaches. Each fruit is examined before use. They have thirty freezers of 100 quarts each, and the freezing is done in fifteen minutes. The ice cream is hardened for twenty-four hours. The employees number 500, of whom fifteen are employed at the telephones taking orders during the night. Each one eats a plate of ice cream at tea-time and enjoys the best of health.

Philadelphia has always been known as Ice Cream City, and claims to have had the first retailer of the delicacy nearly one hundred years ago, a certain Mr. Segur, who kept a candy store in Market Street. In view of the above figures, one can agree with the Secretary of the Association of American Ice Cream Supply Men that in years to come Philadelphia will not be known as the cradle of American liberty, for its Independence Hall, for the largest printing works in the world, and other records the town claims, but for its ice cream records. And by dint of advertising on large and ever novel lines the sale of ice cream in the States is leaping annually. Twenty years ago the estimated total was 25,000,000 gallons. In 1922 it was 242,000,000, with an increase of 11 per cent. over the previous year's figures. The capital invested in the trade twenty years ago was about 15,000,000 dollars, while carefully corrected figures showed that 1922 totalled 250,000,000 dollars; and this would have been exceeded

had the summer been as hot as expected. Just calculate, if you can, the number of employees, tubs, freezers, containers, the amount of salaries, etc., represented, and please note that the above figures do not include the large amount made at home by the public.



Chapter IX.—Wholesale Hints.

If it be true that long treatises on any subject are liable to cause a tired feeling in the reader's mind, and consequent loss of interest in what is being read, it is also true that briefly-written notes or points on a subject are apt to be hastily read and forgotten, and the value of them lost, in spite of the effort to condense the most valuable part of the information into as few words as possible.

Regarding wholesale ice cream, considering the amount of money to be played with, it behoves the trader to impress in his mind as many details as possible, so that the opportunities for making mistakes will be reduced to the absolute minimum. Practice is nine points of the success, but condensed, or quick, knowledge, as it is sometimes called, is always handy. It is just like knowing an important address or telephone number by heart instead of having to run through books and directories to find it.

If the following hints are only a percentage as valuable to readers as they have been to many others, the object for which these lines were written will have been more than achieved.

Do not boil milk or cream; pasteurising or homogenizing is a far better way of destroying bacteria without spoiling parts of the ingredients. Do not allow milk or cream to be stored in warm places; bacteria will result.

Weigh or measure everything that goes into your ice cream; carelessness means loss of profit, besides causing you to be in the dark as to actual percentages, which means not knowing as much about your business as your competitors do of theirs.

If a 10 per cent. fat ice cream is the best for your district why make a 12 per cent. and lose £20 on every £1,000 you take in?

If you are careless about the quality of your ingredients do not blame your customers for being careless in ordering your goods.

Do not use powdered milk if you have not an emulsifier or homogenizer to dissolve it properly; condensed milk is far better and more usual in this case.

Condensed milk is a good thickener—it helps to increase the milk solids and makes a smooth ice cream—but care must be taken to know the percentage of solids it contains, as it has been known to fluctuate from 23 per cent. to 36 per cent., and these fluctuations mean loss of profit and muddled percentages in your finished product.

Condensed milk is a very prolific developer of bacteria, especially when the manufacturers have held large stocks for months. Powdered milk is generally free from bacteria, and can be looked upon as 100 per cent. total milk solids—just what you want when reckoning up the percentage of ingredients to make your 10 per cent. (or any other percentage) ice cream.

Remember to have all ingredients cool; in fact, aged for about twenty-four hours before placing in the freezers. Warm mix containing cream churns, grains and spoils in a cold freezer, and your customers will not like it at all. Nor will you when you have it sent back and have to lose it. About 40 deg. Fahr. is the best temperature for pouring into the freezers.

The time taken to freeze depends on the ingredients and the temperature of the freezing mixture surrounding the container. Ice and salt take about twenty to thirty minutes, brine from five to fifteen minutes.

The latest American method is to use brine at zero instead of at 8 deg. Fahr., freeze for five minutes with brine, then allow the freezer to continue whipping up for two more minutes without brine, so that the ice cream whips up to its upmost, and then draw the ice cream out. Brine costs money; use it properly.

British or Italian freezers rarely give more than a 20 per cent. or 30 per cent. swell. American brine freezers will give anything up to 150 per cent., according to the ingredients and the manner of freezing. If you give commission to your employees, give it on a completely satisfactory article and not on swell only.

Gelatine should be of the very best quality, as it prevents many inconveniences and dangers (such as arsenic) and saves you money in the long run. If you have not a proper gelatine steam boiler remember to dissolve it properly, first in cold water (completely covering it) for about twelve hours, and then in hot (not boiling) water until perfectly dissolved.

Calculate the amount of water used with the gelatine, as this is neither fat nor milk solids, and is likely to upset your percentages. Remember to add the prepared gelatine in a warm state to some warm ingredient. If you pour it into cold milk or cream it will turn into a lump or lumps and spoil the whole mix for you. Gelatine should be made fresh every day; it is dangerous to have overstanding gelatine in your ice cream—the smell will prove this statement.

Too much sugar retards freezing, and costs you sugar, time and money. Besides, all delays are foolish and costly in any trade, especially in the ice cream trade in summer. Seven and a half pounds to five gallons of a 10 per cent. mix are quite sufficient.

Remember that invert sugar is being used more and more in the trade, and it is claimed that it is better than using plain sugar. Boil 100 lbs. sugar, 44 lbs. water and 50 grammes of powdered tartaric acid for not more than thirty minutes and you will have 140 lbs. of syrup that is as good and cheaper than sugar.

Other sugar savers are glucose or corn syrup, malt syrup, etc.; 2 lbs. of glucose are as sweet as 1 lb. of sugar and increase the bulk; 1 lb. 5 ozs. of corn syrup equal 1 lb. of sugar; a proportion of each of these with invert sugar will save sugar and increase bulk.

Do not draw ice cream from freezer into containers that have not been properly cooled or you will get icicles in all the ice cream that touches the sides of the containers. Place the containers at once in the hardening room or hardening box, and make sure that the temperature is as low as possible. Store for at least twenty-four hours, so that the ice cream gets properly hard, retains the swell, on which your profits depend, and ripens into one flavour.

Make your own calculations on cost of all ingredients and materials used. In America statistics from many factories gave 19 lbs. of ice for every gallon of ice cream (six for freezing, nine for hardening and four for packing to shops) and 2 lbs. of salt per gallon (0.7 for freezing, 0.8 for hardening and 0.3 for packing). What are your figures? Dearer or cheaper than these?

When making bricks take all the care possible to prevent melting. If you cannot have a direct-filling plant, have everything ready to fill the moulds as quickly as possible and place them in storage. Changes of temperature do harm in various ways to ice cream; you suffer in profits because of the shrinkage and reduced rush for your goods; the customer dislikes the icicles.

In sending containers and tubs to your retailers, make sure that they are free from rust and that they look attractive, well painted (an economy in the long run) and traceable by means of name and address and number. If you supply cabinets in the American way, make sure that they look a "nice piece of furniture," that they do not leak, and that the ice cream is not spoiled or the ice wasted by letting in of air.

Do not muddle the age of the containers; send out the oldest ice cream first, not the freshest made. Carelessness in this often means stale ice cream in your rooms or boxes that has to be thrown away afterwards. Do not mix stale ice cream with fresh. Do not collect unsold ice cream from customers and mix it with your fresh ice cream, but instruct your men to place it on the top of the fresh delivery. Bacteria, if any, are best in the shop they grew in, not in your plant and, consequently, in all your other customers' ice cream! Never allow ice cream to melt: the result is bacteria.

Supply your dealers with all the best advertisements you can find in the trade, even at the cost of having the American style of showcards for all your retailers. Sales depend on the way the public is attracted to the goods. The more your customers sell the more your profits.

Do not be behind times when the summer fruit season comes in. Do not wait till your competitors canvass your customers with new flavours, but suggest them to them yourself. Supply them with postcards and suggestion-cards, and invite them to drop you a line as soon as they think of something which in their opinion is worth doing. Two heads are better than one; besides, they are in contact with the consumers, not you.

If your job is to supervise the plant or to select a man to supervise it, make sure that everything—factory, garage, insulated delivery motors, horses, ice, salt, cream, milk, powders, fruits, freezers, parts of freezers (especially the beaters, etc., which are *very* important), containers, tubs, hardening-boxes, hardening-rooms, machinery, books, records, labels, cash accounts, etc.—are examined repeatedly. Do not leave anything to Chance—he is a very bad man with whom to deal.

Keep your knowledge up to date by mixing with others in the trade (competitors should be looked upon as friends, not enemies, likely to assist you when in difficulties, not hinder), attend the trade meetings regularly, and read as many trade journals as you can. One man never knows everything.

Do not run away with the idea that should a large newcomer come into your town and upset your trade you can quickly gather all the latest knowledge available and go one better. Be up to date *all* the time; it is cheaper and better.

Do not be away from the factory with the idea that it will be well conducted; personal supervision is the finest trade-puller yet known. When you do go out make a point of calling on your distributors. Personal attention goes a long way.

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Chapter X.—Wholesale Recipes.

Taking for granted that the trader has all the necessary machinery to make ice cream wholesale, we will now discuss a few recipes dealing with the ingredients generally used in the wholesale trade.

To begin with, we must remember certain fixed figures on which to base all percentages and calculations connected with our ice cream, and also keep an eye on the American legal standard or definition of ice cream, because very soon we will have something very similar over here.

The American Government's standard is: Ice cream is a frozen product made from cream and sugar, with or without a natural flavouring, and containing not less than 14 per cent. of milk fat.

Fruit ice cream, etc., need only have 12 per cent. fat, but this reduction can only be caused by the addition of clean, pure and mature fruit in plain ice cream.

Apart from this Government or Federal law, each State has its own legal standard for ice cream, etc., sold within its boundaries. Generally they fluctuate between 8 per cent. and 14 per cent. fat, with a reduction for fruit ice cream—0.2 per cent. to 1 per cent. gelatine, 18 per cent. to 33 per cent. milk solids, no colouring or adulteration whatever in plain ice cream (adulteration also means addition!), and so on. At one time gelatine was entirely prohibited.

However, the average ice cream in America contains 8 or 10 per cent. fat, 0.5 per cent. gelatine, 12 per cent. sugar, and 33 per cent. total milk solids.

Gelatine is about 100 per cent. total solids; no other value is attached to it chemically.

Sugar, also, is about 100 per cent. total solids, and nothing else.

Milk is generally 4 per cent. fat and 8.64 per cent. serum solids, and the rest is water.

Skim milk contains no fat, but is calculated at about 9 per cent. serum solids.

Skim milk powder equals 95 per cent. serum solids.

Unsweetened condensed skim milk has 20 per cent. serum solids.

Sweetened condensed skim milk has 28 per cent. serum solids and 40 per cent. sugar.

Sweetened condensed milk contains 8 per cent. fat and 28 per cent. serum solids.

Unsalted butter contains, generally, 84 per cent. fat, 15 per cent. moisture and 1 per cent. curd.

Cream fluctuates in fat percentage, of course; it can be as high as 67 per cent. and as low as 15 per cent. in fat, and have from 3.7 per cent. total solids in very rich cream to 8.2 per cent. in low cream. A "35 per cent. fat" cream has 35 per cent. fat and 5.85 per cent. serum solids.

We are all familiar with the charts drawn up by importers of milk powders showing what amount of water and butter one has to add to the powders to produce milk or cream of a certain percentage of fat. I will not weary the reader with long details of this; he can get the chart from the importers of milk powders or make them up himself from the figures just given him.

Herewith a few recipes, all based on the 100-lb. method used practically all over the States now, and showing the various percentages of each:—

Ingredients.	Weight. lbs.	Fat.	Sugar.	Serum Solids.	Total Solids.
Sugar	12·0	—	12·0	—	11·40
Gelatine	0·5	—	—	—	0·47
Skim milk powder ...	6·0	—	—	5·7	5·70
30 per cent. cream ...	18·5	5·5	—	1·14	6·64
4 per cent. milk ...	63·0	2·5	—	5·4	7·90
(And flavour of course)	100·0	8·0	12·0	12·24	32·11

Here, in a nutshell, you have a really fine recipe, giving, with the cheapest ingredients advisable for the product, 8 per cent. fat, 12 per cent. sugar, and 32.11 per cent. total solids. The same percentage of fat and practically the same percentages of other ingredients may be obtained with:—

12 lbs. sugar,
0.5 lbs. gelatine,
6.0 lbs. skim milk powder,
26.7 lbs. 30 per cent. cream,
55.8 lbs. skim milk,

or

12 lbs. sugar,
0.5 lbs. gelatine,
6.0 lbs. skim milk powder,
6.0 lbs. 84 per cent. butter,
75.5 lbs. 4 per cent. milk,

or

12 lbs. sugar,
0.5 lbs. gelatine,
9.6 lbs. 84 per cent. butter,
13.2 lbs. skim milk powder,
64.7 lbs. water.

The latter recipe is becoming well known to British users of emulsifiers, who have laid stress on the cheapness of water in making cream or milk.

Compared with the first recipe, giving details of percentages of each item used in the recipe, only one percentage—viz., the last one—has 8.06 of fat (and therefore only 8.06 of total solids) for the 9.6 lbs. of butter; and 12.57 serum solids (consequently only 12.57 of total solids, as there are no other figures) for the 13.2 lbs. skim milk powder. Water, of course, has neither fat, serum solids nor total solids.

If you wish to increase the sugar percentage to 14 per cent., you will have to reduce the percentage of water or other ingredients. But then, again, 12 per cent. is quite sufficient. In further recipes you will notice how the percentage of sugar is arrived at with other ingredients, such as sweetened condensed milk.

An ice cream containing 10 per cent. fat and the usual percentages of serum solids and total solids can be made thus:—

Ingredients.	Weight. lbs.	Sugar.	Fat.	Serum Solids.	Total Solids.
Sugar	12·0	12·0	—	—	11·40
Gelatine	0·5	—	—	—	0·47
Skim milk powder ...	5.0	—	—	4·65	4·65
30 per cent. cream ...	26·0	—	7·8	1·61	9·41
4 per cent. milk ...	56·5	—	2·26	4·83	7·09
	100·0	12·0	10·06	11·09	33·02

Flavour, such as vanilla, makes very little difference to the finished product; but care must be taken with the amount of water used to dissolve the gelatine if you are using any. With American machinery it is customary to incorporate the gelatine (soaked overnight) in the whole mix, when it is being passed through the pasteuriser, etc. That is why no mention is made in the above recipe, otherwise 0.5 lb. of gelatine, having to be dissolved in 5 lbs. of water, would mean having to re-arrange the above figures, as anyone with common sense will see for himself.

The same percentage of fat, and practically the same other percentages, can be obtained by using:—

12 lbs. sugar,
0.5 lbs. gelatine,
6.0 lbs. skim milk powder,
9.0 lbs. 84 per cent. butter,
75.5 lbs. 4 per cent. milk,

This will give 12 per cent. sugar, 10.06 fat, 11.77 serum solids and 33.70 total solids,

or

12.0 lbs. sugar,
0.5 lbs. gelatine,
12.0 lbs. 84 per cent. butter,
12.0 lbs. skimmed milk powder,
63.5 lbs. water.

This shows 12 per cent. sugar, 10.08 per cent. fat, 11.4 per cent. serum solids, and 33.35 per cent. total solids, or, allowing for 14 per cent. sugar,

6.8 lbs. sugar,
0.5 lbs. gelatine,
18.0 lbs. sweetened condensed milk,
27.0 lbs. 25 per cent. cream,
47.7 lbs. 4 per cent. milk.

This shows 14 per cent. sugar, 10.09 per cent. fat, 10.74 per cent. serum solids, and 34.96 per cent. total solids,

or

12.0 lbs. sugar,
0.5 lbs. gelatine,
18.0 lbs. evaporated milk,
28.0 lbs. 25 per cent. cream,
39.5 lbs. 4 per cent. milk.

This gives 12 per cent. sugar, 10.02 per cent. fat, 8.50 per cent. serum solids, and 32.29 per cent. total solids.

You will understand that once you know the constituent parts (sugar, fat, serum solids and total solids) of the various ingredients (milk, powdered milk, evaporated milk, unsweetened condensed milk, sweetened condensed milk, cream, butter, and even skim milk, if you are using the latter) you can draw up your own recipes. Take care not to start mixing the ingredients in the machines before calculating the whole of the figures. It is of no use, for instance, putting 12 lbs. of sugar to a hundred-pound batch, as above, if you intend using sweetened condensed milk in the recipe. You must either dispense with the condensed till another time or take the sugar out of the milk or cream—if you can!

Recipes for a 12 per cent. fat ice cream are the following:—

12.0 lbs. sugar,
0.5 lbs. gelatine,
2.0 lbs. skim milk powder,
41.0 lbs. 25 per cent. cream,
44.5 lbs. 4 per cent. milk.

This will give 12 per cent. sugar, 12.03 per cent. fat, 8.52 per cent. serum solids, and 32.52 per cent. total solids.

or

12.0 lbs. sugar,
0.5 lbs. gelatine,
3.0 lbs. skimmed milk powder,
10.8 lbs. 84 per cent. butter,
73.7 lbs. 4 per cent. milk.

This shows 12 per cent. sugar, 12.01 per cent. fat, 9.14 per cent. serum solids, and 33.02 per cent. total solids,

or

8.4 lbs. sugar,
0.5 lbs. gelatine,
14.0 lbs. sweetened condensed milk,
38.0 lbs. 25 per cent. cream,
39.1 lbs. 4 per cent. milk.

This gives 14 per cent. sugar, 12.08 per cent. fat, 9.67 per cent. serum solids, and 35.89 per cent. total solids,

or

12.0 lbs. sugar,
0.5 ~~lbs.~~ gelatine,
20.0 lbs. 8 per cent. evaporated milk,
30.0 lbs. 30 per cent. cream,
35.5 lbs. 4 per cent. milk.

This shows 12 per cent. sugar, 12 per cent. fat, 8.50 per cent. serum solids, and 34.27 per cent. total solids,

Of course, this percentage of fat, etc., may be obtained with other ingredients previously mentioned. But remember to get the percentages worked out on paper first; do not go about it haphazardly or you will repent.

A 14 per cent. fat ice cream may be made with:—

Ingredients.	Weight. bs.	Sugar.	Fat.	Serum Solids.	Total Solids.
Sugar	12·0	12·0	—	—	11·40
Gelatine	0-5	—	—	—	0·47
Skim milk powder ...	2·0	—	—	1·90	1·90
30 per cent. cream ...	41·0	—	12·5	2·55	14·85
4 per cent. milk ...	44·5	—	1·78	3·80	5·58
	100·0	12·0	14·08	8·25	34·20

or

12.0 lbs. sugar,
0.5 lbs. gelatine,
2.0 lbs. skim milk powder,
13.3 lbs. 84 per cent. butter,
72.2 lbs. 4 per cent. milk.

This gives 12 per cent. sugar, 14.05 per cent. fat, 8.15 per cent. serum solids, and 34.07 per cent. total solids,

or

12.0 lbs. sugar,
0.5 lbs. gelatine,
16.7 lbs. 84 per cent. butter,
8.6 lbs. skim milk powder,
62.2 lbs. water.

This gives 12 per cent. sugar, 14.02 per cent. fat, 8.17 per cent. serum solids, and 34.06 per cent. total solids,

or

11.6 lbs. sugar,
0.5 lbs. gelatine,
6.0 lbs. 8 per cent. sweetened condensed milk,
40.0 lbs. 30 per cent. cream,
41.9 lbs. 4 per cent. milk,

or

11.6 lbs. sugar,
0.5 lbs. gelatine,
6.0 lbs. condensed skim milk,
16.7 lbs. 84 per cent. butter,
65.2 lbs. skim milk.

The reader will probably agree with me that we have dealt with enough recipes, and that if he wants any more he can make them up himself. So we will end this chapter with a return to an 18 per cent. fat, which is about the highest he is ever likely to want:

2 gallons heavy cream,
2 gallons milk,
6 lbs. sugar,
2 ozs. gelatine,
Flavour.

Chapter XI.—Sandy Ice Cream.

The most acute problem that has had to be faced during the last few years in the wholesale ice cream trade in America has been that of gritty or sandy ice cream. Gallons of ink and reams of paper have been used up in the discussions and proposals anent this far from attractive taste in ice cream, and the least said about the large amounts of money and time spent to solve the problem the soonest believed. Were we used to huge factories and capital, as they are in America, we would believe the figures sooner.

One firm reported that as soon as they started using condensed skim milk they got complaints about the sandy texture of their ice cream. Coming from very distant customers they thought it was due to change of temperature surrounding the ice cream. But as another plant belonging to them and using the same ingredients and methods of freezing and storing had no such troubles the mystery deepened. They set to work, going over all the plant, examining every part of every machine used, putting special men to oversee every portion of the mixing, pasteurising, homogenising, freezing, holding and shipping, etc., examined every ingredient used, played with the recipes until they exhausted them all. Eventually they found that the fault lay in the way the condensed milk had been made.

During their investigation they doubted whether the percentage of "milk solids not fat"—i.e., that portion of milk, cream and butter, etc., which is neither fat nor water—they were using was the right percentage. Their formula or recipe showed 8.12 per cent. fat, 12.71 milk solids not fat, 12.99 sugar, 0.55 per cent. gelatine and 34.37 per cent. total solids. They reduced the percentage of milk solids, not fat, a little and the trouble practically disappeared.

Another improvement was effected (although their retailers did not help them as much as they should) by doing their utmost to have the ice cream delivered to all

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their customers, the very distant ones especially, at as near the same degree of cold as when it left the hardening rooms; that is to say, to eliminate changes of temperature during transit. Granted that the delivery motors are insulated, carry plenty of ice and salt, and are so constructed that the ice cream containers and bricks are kept very hard and cold, still there is always some increase in temperature during the transit, especially during very hot weather. Attention to this also helped.

The only correction they made at the plant was not to " hold " the mix too long before freezing, so that the acidity would not increase and probably add to the " sandying." So, between imperfect condensed milk, holding the mix too long before freezing and the change of temperature surrounding the frozen ice cream during transit, they discovered the key to the costly trouble.

The chemist of another large wholesale factory also went into the trouble (and he was not the only one!), and came to the following conclusions: Sandiness is caused by the precipitation (powdering or depositing) of the lactose or milk sugar in the ingredients used. This lactose takes ten times longer than sugar to dissolve, and this precipitation appears when the ingredients containing lactose are not pasteurised, when there is a high degree of acidity in the milk or cream and the pasteurisation is imperfect or incomplete, when the recipe or formula is not perfectly balanced —i.e., the ingredients are not used in the best proportions, such as too little sugar, too many milk solids not fat, etc.— and when the frozen ice cream is subjected to changes of heat or temperature. In physics the word " cold " does not exist; a thermometer registers the temperature of anything. What we colloquially call cold is merely a low heat.

This chemist advises efficient pasteurisation of the ingredients—*i.e.*, holding them in the pasteuriser at 145 deg. for thirty minutes, homogenising them and cooling them— using the very best of quality in every item used, keeping the ingredients agitated as much as possible, so that the lactose dissolves better and the precipitation is reduced, and taking full care that the temperature of the ice cream is kept as constant as possible.

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It should be added that changes of temperature before freezing also add to the sandiness, and that as this trouble appears a few days after freezing, retailers should be instructed to keep the ice cream as cold and as hard as possible by a liberal use of ice and salt.

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SECTION III.—BACTERIA AND HISTORY.

Chapter XII.—Bacteria.

A lot has been said and written about bacteria, or undesirable microbes, in ice cream, caused by dirty ingredients and dirty methods. Probably too much has been written, but the fact remains that in the fight for a good name for quality of your goods, especially foodstuffs, nothing helps more than being able to prove that the bacterial contents of your ice cream is very low.

You probably remember the exposing of the ice cream scandals in 1901 or so, when two of the best analytical chemists in London made a tour of the busiest ice cream centres, such as Clerkenwell, Hammersmith, etc., and after the most exhaustive examinations published two reports, one on the quality of the ice creams examined and another on the water generally used to wash the ice cream glasses in. To put it mildly, these reports made people sick! It is incredible still that the public, knowing how the poor (and dirty) vendors lived, should have allowed their children to eat the stuff they made.

In each case the ice cream, whether sold in shop or from stalls, was made with milk, sugar, eggs, cornflour and vanilla, and showed, in round figures, from 24 to 28 per cent. total solids, from 2 to 5 per cent. fat, 3 to 5 per cent. albuminoids, 11 to 14 per cent. sugar, 4 to 7 per cent. starch and 0.3 to 0.7 per cent. ash. Fortunately, all these ingredients were boiled, thus destroying about 99 per cent. of the millions and millions of bacteria already swarming in the milk and other ingredients kept in dirty places and used without any sense of cleanliness whatever.

When it came to the microscopical examination, however, all sorts of undesirable matter were found in the samples, including human hair, coal dust, fragments of bed straw, hair of dogs and cats, sour crusts, fleas, bugs and many other nauseating articles! The reports said that

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" the manufacture and storage were carried on amidst an utter absence of cleanliness in their person and surroundings," and a broad hint was dropped on the danger to children of the poorer classes, who were the more usual customers.

The bacteriological examination was a very difficult matter owing to the huge numbers of bacteria (some of them the most dangerous, found in sewers, etc.), but eventually, after much beef broth had become putrid owing to the very dirty ice cream samples, the two chemists were able to get out their figures. The cleanest ice cream only contained 119,000 bacteria to the cubic centimetre (about eighteen drops), the dirtiest 7,132,000! The water used for washing the glasses used by the street vendors (the " washing " merely consisted in a dip in the pail, a tap-tap-tap movement, and, very rarely, a touch with the dirty towel hanging over the vendor's shoulder or tied to one of the blind supports at one of the corners and used for other purposes, such as drying the moist container lid, the spoon, and sometimes the face of a not too clean urchin when " Jack " was not looking) was found to be, in the majority of cases, an evil-smelling, thickish and slimy liquid, full of bacteria and sediments, including, of course, saliva from the many mouths that had touched the glasses during the day!

The reports ended by stating that if the water at Hampton (Thames) has only 92,000 bacteria to the cubic centimetre, and is only used for boating, why should this ice cream water, containing as many as 5,300,000 bacteria to the cubic centimetre, be allowed for washing glasses that have to touch mouths and lips of poor children? Some control or other should be started at once.

Result, a public scandal of the first magnitude, a great drop in the sale of ice cream, even in the best-kept shops, and eventually a London County Council regulation that prohibited the manufacture, etc., of ice cream, water ices and similar foodstuffs in any shed, room or place used as a living room, or in which there was a drain or a lavatory, etc., and prohibited any contamination whatever to the ice cream. It also ordained that the name and address of the actual manufacturer should be exhibited on each barrow Fine, 40s.!

Forty pounds would have been more adequate!

Perhaps the finest thing brought about by this scandal was the breaking up of the "boss" system in the various Italian quarters throughout the kingdom, where poor agricultural and very ignorant and illiterate lads, fresh from Italy, lived under cruel bosses and under nauseating conditions at a very miserable wage, which was often replaced by kicks and bullying, especially if the day's takings had been very low, in spite of the weather being bad!

Returning to the other microbes of our industry, we should remember that if the analysis of our ice cream shows more than 10,000 bacteria to the cubic centimetre (1 gramme), it is not as clean or pure as it might, and should, be. If the milk or cream is pure and carefully handled from cow to factory, if the gelatine is of the very best, as previously advised, and has a very low bacterial count instead of such huge figures as 30,000,000,000 to the ounce, equivalent to 50,000 per cubic centimetre in the finished ice cream; if the condensed milk is not stale and filled with bacteria; if all the machinery is kept clean, sterilised repeatedly; if clean and hygienic methods are the rule in your factory, then there will be very little chance of sanitary inspectors or competitors presenting you with astonishing figures.

Pasteurisation destroys 95 per cent. of the bacteria likely to be harmful to the human body—*i.e.*, the pathogenic organisms that cause such diseases as septic sore throat, measles, diphtheria, typhoid fever, tuberculosis, etc. Germs of anthrax and tetanus (lockjaw) escape destruction under heat as used in pasteurising—*i.e.*, 145 deg. Fahr. for thirty minutes, which is better than one minute at 160 deg.—but will not cause the complaints when introduced into the human system *via* the mouth, as in eating ice cream. This method also destroys the organisms that make milk sour, etc.

Fortunately for us, ice cream can be, and is, produced with a low bacterial count. Otherwise all sorts of enemies would be up against us, and the trade would dwindle out of existence.

In American trade statistics I find that cream ices have been known to contain as high as 8,000,000,000 bacteria to the c.c. (absolutely eating disease!), and as low as 20,000; cream from 1,150 to 37,600,000; condensed milk from 31,500 to 59,800,000; sugar from 20 to 225, because it contains no moisture and is generally kept under cover; gelatine from 48 (very pure) to 30,000,000,000 (more than criminal); vanilla from 10, kept hermetically sealed, to millions in carelessly kept liquid flavours. So it is for the trader to keep an alert eye on the quality and conditions of his purchases and storing system, on the system used in holding the "mix" at a low temperature after pasteurising same, and the ice cream after freezing, as this never actually destroys all the microbes as some think. They are ever ready to grow again, and, as is well known, multiply by fissure—*i.e.*, by splitting in half at a tremendously quick rate.

Attention should be paid to the machines and utensils used, especially as to seams, cracks, holes, etc., where the live steam or boiling water and washing powder or disinfectant (a pleasant smelling germicide is the best) cannot reach. Perfectly smooth soldering eliminates most of this trouble.

I could quote from many publications dealing with bacteria in ice cream, the publications of the various university dairy colleges in America especially being very interesting; but it can all be summed up in the following words:—Cultivate cleanliness in everything, make it your mania, make sure of the results of constant investigation, and have no fears of criticisms or disaster. The ice cream trade is likely to have many fights in the future, but if it wins on bacteria it will win all the others.

Chapter XIII.—History.

The history of ice cream, cold drinks, etc., is very interesting indeed, and would be more so if further details, dates, etc., could be obtained.

Briefly one has to remember that the Bible mentions "cooled wines," and in the excavations of ancient Troy, the seat of Homer's "Iliad," and its many battles, large earthenware jars have been found embedded in the earth, probably in what were large snow cellars filled with oil and other liquids. This points to a system in cooling liquids for the table, especially in hot weather.

History tells us that Alexander the Great (born 356 B.C., died 323), that young, very young, but unequalled warrior of ancient times, found the heat of Asia so trying that some cooler or other became imperative. One of his captains (name, alas! lost for ever) solved the problem by obtaining snow from the mountain caverns, and cooling fruit juices and drinks with it. To add honour to the much-worshipped soldier the name Macedonica was given to the cooled drinks, and, strange to say, the name Macedoine is still used in the culinary profession in such dishes as Macedoine de fruits, etc.

A Roman writer named Quintus Maximus Gurges left a book of recipes for cooks, etc., and mentions a method of freezing wines, milk, water, etc. Evidently the snow was obtained from the mountains around Rome by means of slaves, and something added to it so as to freeze the liquids.

When the great Italian navigator, Marco Polo, died in 1323, at a very old age, he left his memoirs of journeys in China and Japan as Ambassador for the State of Venice, which was then the most powerful in Italy, and mentioned that he saw frozen milk and water sold in the streets in summer. This is the first mention of commercial ice cream, evidently; but we must remember that in southern countries—Sicily, for instance—semi-frozen lemonade is the usual drink in the morning and afternoon instead of coffee and tea. How long this habit has been in existence no one knows, but it makes for added interest in our history.

Nothing more is heard about ices or drinks until about the discovery, at some uncertain date, of the use of salt with snow, instead of saltpetre, to produce a much lower temperature, and actually get the liquids to freeze.

In 1539 Caterina de' Medici, of Florence, married King Henry II. of France, and took her own Italian chefs with her to ensure ices at her tables. This points to the fact that the Italian aristocracy, if not the public in general, were used to ices.

The French aristocracy and society also took to ice cream and Italian frozen or cooling delicacies, and we have descriptions of some very beautiful "limonaderies," refreshment shops catering for cooling drinks, semi-frozen lemonade and ice cream in the shape of eggs; in other words, ice cream shops run by Italians, as obtain in Britain at present. There was also an association of these traders. The principal traders appear to have been Controso, Procopio, Coltelli, Tancredi Latino, Biagio Villa, Santorio, and a certain Godette, whose "Glacerie" was all of glass and situated in a large garden, from any corner of which one could see, through the "limonaderie" itself, the other parts of the garden.

In Britain the first mention is in connection with Charles I., who gave his Italian chef, Demirro, Demarco or Di Meo, a pension of £20 per annum to keep to himself the secret of the "frozen eggs" he made for the royal table. This was about 1640. The secret either leaked out or was obtained from Italy or France, because ice cream became known in Britain, and in 1769 a recipe appeared in Mrs. Raffald's "English Housekeeper," and another mention of ice cream appears in an article by Mrs. Piozzi. Emerson, in a lecture published in 1841, makes a sarcastic reference to the custom of providing ice creams for friends instead of entertaining them with witty conversation; so we can safely take it that the delicacy was well known by that time, at least in the better classes.

And in all probability the opening of the first Italian

Swiss ice cream shops dates back to earlier than 1840, as some would try to fix. It was Agostino Gatti who first started, or beat all predecessors, with a shop at the corner of Leather Lane and Holborn, a spot now occupied by the Prudential Insurance Company's imposing buildings. How many shops he had in all no one knows, but the large establishment of his in Villiers Street, Charing Cross, is still remembered as a very busy place, considered a "gold mine." In fact, when the place was demolished to make room for Charing Cross Station and part of Hungerford Bridge, Gatti claimed £54,000 There is no need to dwell at length on similar establishments in London and seaside resorts, but it is well to remind traders that these shops were responsible for a continuous demand for ice cream in contrast to the barrow vendors who increased in numbers and unattractiveness.

It is no intention of the writer to take up space and time with descriptions of the terrible life these itinerant vendors led. Huddled together, mostly in the poorer quarters of the town, where lodgings were cheap and sanitary control overlooked, they led a life of a miserably motley variety, overcrowded in sleep and work, more than ill-treated, and forced to make long journeys to get ice and salt cheap in the early hours of the morning, then made to freeze the ice cream under revolting sanitary conditions, either in badly ventilated sheds or, as in the Italian quarter of London, on the pavements themselves, and then to drag their heavy barrows, on a semi-empty stomach, to distant pitches in the town, where the boys and hooligans of the neighbourhood annoyed them, broke their glasses, threw dirty matter into the freezers, and sent them home in tears and without money. Was there any sympathy for them when they reached "home"? Nothing excepting curses and blows for the small takings. This lasted for years, in spite of the protests of the better Italians, who knew of the large salaries mentioned to get the poor chaps away from Italy and the infinitesimal proportion actually paid after deducting all breakages, fines, return fare, and so on. But one day a maddened "garzone" stabbed his bullying "padrone" with his ice-pick and left him dead, lying across a tub. This revenge changed the whole situation, and the system soon collapsed, but none too soon. We have still to beat down the bias against ice cream caused by the above system. These old Italians now possess fine ice cream shops, barrows are a mere relic here and there, and the trade is well boomed up Still, there is a bias. This, however, will disappear more and more in the face of better shops, etc.

In Germany, France, Russia, etc., the trade conditions have been very much the same as in England.

America, the ice cream country, has a history of its own. According to some it was an Italian called Bosio who introduced it there about 1770. Mr. Hall, a confectioner or milk dealer, of 75, Chatam Street (now Park Row), is claimed as the first retailer. Others say that a Mrs. Johnson introduced it at a ball on December 12th, 1789, and that a Mrs. Jackson introduced it at a dinner in Washington at which President Jackson was present. Another Jackson, a negro employed at this dinner, learned the recipe, and started selling it at 1 dollar per quart, and died rich in spite of much competition. The first advertisement appeared in the New York "Post Boy," June 8th, 1786, stating that "ladies and gentlemen may be supplied with ice cream every day at the City Tavern by their humble servant Joseph Crowe."

The first wholesaler was Jacob Fussell, of Baltimore, a wholesale milk dealer, who often had difficulties, owing to transport problems, to overcome the disposal of cream and milk left on his hands. He ventured into ice cream, and made a great fortune from it, investing thousands in railroad shares, opened factories in Washington and New York, refused 500 dollars for the recipe from a firm in Brazil, and finished his career by opening factories, with a partner, in St. Louis, Chicago and Cincinnati. He had started at 60 cents per quart and finished at 1.25 dollars, thus pointing to better-quality, better-price, experience.

What is considered to have been the greatest "push" for the sale of ice cream was the introduction of the front service soda fountain—*i.e.*, instead of the customers being faced with a small box-shaped marble fountain, perched on the wall behind a counter, simply containing the syrups and the soda water tap—they met at last with a very attractive counter containing a very sanitary arrangement of syrup jars, fruit jars, ice cream containers embedded in ice and salt, which also cooled the syrups and fruits, and having neat facilities for washing up attached to hot and cold water supply. This was about 1903, when Mr. F. H. Lippincott (whose firm is still one of the best in America) introduced the first of this style on the market. Apart from putting an end to the constant turning round to serve each customer and the trip to the ice cream and back, this gave the public a satisfactory pull to soda fountain drinks and ice cream never before experienced. Result, a tremendous industry for both in the States, ever on the increase and spreading all over the world.

Ice cream sodas (ice cream in a soda fountain drink), of course, sell more than plain ice cream, and nearly as well as bricks. It is stated that to satisfy a customer whose "milk and soda shake" was impossible one morning, owing to the non-arrival of the fresh milk, the confectioner or chemist suggested a soda with fresh-made ice cream as the nearest thing to it. This pleased the customer very much, and he ordered another. The novelty soon spread amongst the other customers, and became a general trade drink. It seems strange that no one had thought, especially in hot weather, of serving a cold ice cream with a glass of soda water or sweetened drink! But there is no strangeness in the fact that many towns are now claiming to have originated the ice cream soda—a historical parallel to Homer, the greatest of Greek poets, who, starved and blind, hardly found a shelter while alive, but after his death seven distinct towns claimed to be his birthplace.

As far back as 1893 an American magazine (*not* a trade publication, be it noted) stated that ice cream soda was the national beverage, which proves that it was more than well known. And the present-day figures total about 1,000,000,000 dollars spent annually on ice cream drinks in the States alone. When one considers that there are other countries, and that the trade is still comparatively in its infancy, a feeling of immensity must surely come over him.

SECTION IV.—THE SODA FOUNTAIN.

Chapter XIV.—The Fountain.

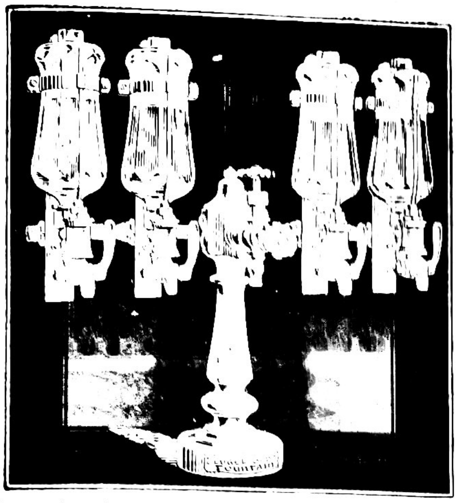
As stated, the soda fountain, especially the beautiful front-service types, has been more instrumental than any other thing in achieving the huge sales of ice cream. What is the use of good factories and attractive delivery motors if the customers are not attracted to the ice cream counter? And we must not forget that the variety of drinks offered at the fountain broke the monotony of the eternal plain glass of ice cream, and created that either-one-or-the-other grip on the customer that makes for increased sales.

Briefly, a soda fountain is a counter or service board containing soda water, syrup jars, ice cream cabinets, washing facilities, etc. The old-time fountain was merely a marble box with a soda water tap and a few syrup jars, and not always with a small ice box to cool the syrups and soda water; the modern makes, which run sometimes into hundreds of feet, are provided with electric carbonators to make the soda water automatically, a cooling system to keep the soda water and syrups and even fruits as cold as possible without freezing them, hot and cold water facilities, ice cream containers that slip easily into the holed jackets, so that the ice and salt do not stick to them, fresh water taps, and so on.

As the larger fountains are generally made up of units—*i.e.*, repetition sections that seem only one—it is better to describe the average small fountain.

The customer sees a marble counter, generally in two colours, such as white with green or black borders, a marble top and a very attractive soda water arm or tap, which generally forms part of an ornamental electric light shade. By looking over the top the customer sees a beautiful and clean arrangement of pumps, polished lids over the ice cream containers, a sanitary wash-up basin (sometimes one at each end of the fountain), the ice cream disher (measure spoon) in its own basin, fruit jars immersed in the cooling arrangement, and everything spick and span and inviting.

The trader, in serving the customer, finds everything at hand without any of that running and turning about that was the usual trouble under the old order. Catching the glass in his left hand he holds it under the faucet of the pump labelled, say, lemon, presses the pump down with only one movement, thus liberating a measured amount of sweet fruit syrup, takes the disher from its jar containing water to keep it clean and fresh, flicks the lid of the container over its hinges with one finger, gets the measure of ice cream, releases it in the glass, closes the container and replaces the disher with practically one movement of the hand, turns the soda water into the glass, then the "fine stream" by means of the same handle turned sideways, so as to mix the drink up properly, places the long soda spoon in the glass, then two straws from the silver-plated straw box or the glass jar, and hands the fresh, cold and attractive drink to the eager customer. This in operation is much quicker than the above description probably conveys, and is the essence of neatness, quickness and sanitary service.



A Type of Soda Fountain Suitable for the Shop with Limited Space.

A sundae is served even quicker. The sundae glass is held in the left hand, the disher of ice cream dropped in it, a ladle of fruit and syrup poured over it, a spoonful of nuts sprinkled over this, a wafer placed on the side, a spoon, and there you are!

There is no turning round to get a glass off the shelf, no getting hold of cumbersome and probably dusty bottles, no pulling of faces to undo a very tight stopper, no squirting of the gassy drink over the customers, no splashing the drink by over-frothing it in the glass (and what annoyance and damage are sometimes caused by this!), nothing at all of all these troubles.

And the drink is much cheaper than the bottled drink, fresher, purer, etc. The soda fountain is to the drink trade what the electric freezer is to the ice cream trade and the railway train or aeroplane is to traffic—much, much better than anything previously used or known.

Some fountains attract by the beauty of the many colours of materials used here and there, others have even more attraction with a plain white; in fact, this all-white scheme of decoration cannot possibly fail to convey to the customers a feeling of freshness, cleanliness, sanitary arrangement of everything likely to come in contact with the drinks, etc.

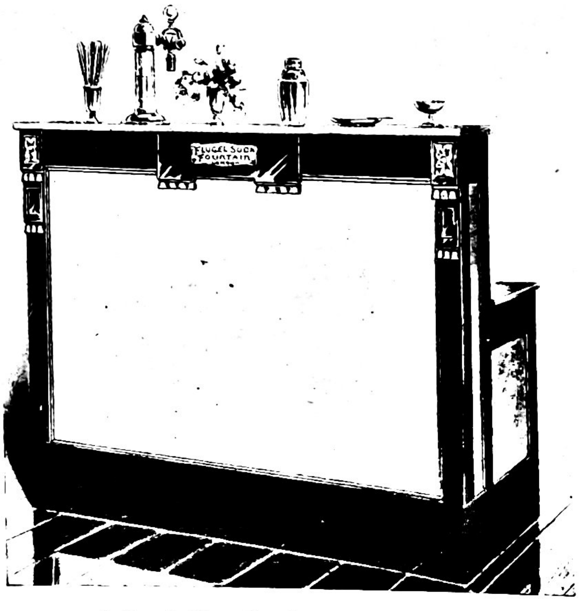
Each trader will have to settle the colour scheme himself, especially in relation to the colour or atmosphere of the surrounding parts of the shop. A clash in colours would be ridiculous; even the customers would laugh at the incongruity and cease to be interested in the fountain, or its owner. Results, fewer customers and less profits. To overcome this problem manufacturers not only offer to make a fountain to any colour scheme desired, but generally include in the quotation a beautiful back-bar, with an arrangement of mirrors, shelves and border that will not clash in any way with the fountain. After all is said and done, even a beautiful fountain can be lost or wasted to a customer if the background is unattractive, plain, incongruous, and so on.

Symmetry, beauty, practical arrangement of everything are necessities, and if you are not gifted with them you can pay specialists to set everything in order for you. So there is no excuse for inadequacy in the soda fountain line.

There are so many makes on the market that a description of each or even most of them would be not only monotonous but unnecessary. Any firm will gladly supply catalogues, price list, illustrations and descriptions in answer to a postcard or letter. Trade journals carry advertisements of the better known and more successful; the trader can do the rest. So we will limit ourselves to a few points that should be thrashed out before purchasing a fountain.

The cost, size, service, etc., are best left to the future owner. He knows whether he just requires a plain soda arm and a few syrup jars or a small structure embodying a little more of everything or a large marble fountain. He also knows whether one quart syrup jar of, say, four or eight flavours is enough, or whether he should have two or three of each flavour and one, two or three soda taps. He will also soon be able to decide whether a small or large carbonator to be agitated by hand will suit him best or whether an electric carbonator giving a continuous supply of water well saturated with gas is the thing for him. As the latter are in all sizes and prices, I would advise him to purchase one of them and save that lull in the service every few hours (generally when there is a rush!) to let the water in the carbonator, turn off the water supply, let in the carbonic gas from the tube, and then turn the handle left and right until the pressure of gas denotes that the soda water is ready.

One important point is the contamination of the water by metals. It is a crime to allow a fountain to be placed in your shop if the carbonator and the coil from it to the soda arm are not of pure block tin or heavily tinned metal. Such metals as lead, copper, etc., contaminate the water, especially when it contains gas, and do no good to the average customer and a lot of harm to a weak stomach or to a customer whose blood is out of order or who has just taken some food that will not go well with even the slightest contamination. You would not allow a rusty ice cream container; why allow the other danger? Attention to this and to the best method of keeping fruits as cool as possible and the ice cream frozen hard will be amply repaid by more and better trade free from annoying complaints and possibly summonses by the sanitary authorities. In Britain there is a silent competition and fight between the much harassed mineral water bottlers and their new competitors, the soda fountains. Factories have been erected and maintained year after year at the expense of much money, improvements, purchasing of machinery of a very costly nature, eternal visits from inspectors, and so on. Competition makes each bottler pay special attention to the thorough washing of each bottle, purchase of the purest ingredients, and no leakage whatever in the matter of paying the table



A Small Clear Service Soda Fountain.

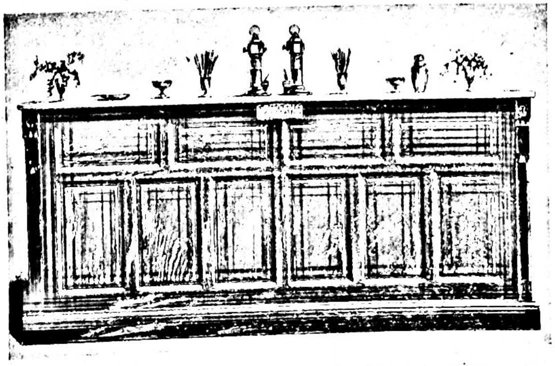
water tax and other burdens imposed on the trade, much to the decrease in consumption. They grumble of late that traders who have always received the best attention from them turn over to soda fountains, make the drinks as quickly, easily and cheaply as they can, only enter a proportion of the number of drinks sold in the Excise book, and not only undersell the mineral waters sold in bottles, but actually get a larger profit even then.

This competition cannot be prevented: it is human nature to resent a newcomer and a competitor. In fact, we must not forget that the great decrease in the consumption of mineral waters in bottles (as much as 23 million gallons in three years!) has been caused not only by less money in circulation, bad seasons, etc., but also by the increased number of soda fountains. And this increase, let it be said as emphatically as possible, cannot and will not be stopped. The soda fountain has come to stay, and will spread itself all over the land, quicker than is expected by even the enthusiasts of the refreshment trade.

Decide on the soda fountain you intend purchasing as the most suitable for your store and the one with the least defects from a mechanical and hygienical point of view: waste of ice, drips from the syrup pumps, corrosion of the plated parts, etc., soda water carbonator and quick supply, etc., all these points should be carefully considered before ordering the fountain and paying for it. Even if you have it on the hire-purchase system, as adopted by some firms, you will have to put up with its inconveniences while placing it, running it and returning it. And to all this you must add the possibility of becoming disgusted with it and refusing to install another, thus losing the profits and the advertisement that a soda fountain brings with it.

Get as many illustrations and quotations as you can from firms dealing in fountains, compare each with the others, get the travellers to speak of the advantages of their makes as compared with others, and, as I advised in connection with ice cream machinery, you will learn a lot, and probably save much money and trouble.

As soon as you are ready for the fountain, start advertising it right and left in your neighbourhood by means of advertisements in the local papers, church magazines, and concert, cinema, dance and theatre programmes, and on handbills, circulars, etc., at meetings, at-homes, etc., laying special stress on the purity and freshness of the drinks and ices you are able to sell. But make sure that you start rightly, with everything spick and span, the arrangement of the fountain as it should be, the quality and freshness of all ingredients as perfect as possible. The writer had visions of a soda fountain for years; it was the mania of a lifetime. When he eventually had his own way and started one, guess what he did? He forgot to read the directions on the jars of fruit, which already contained acid, and diluted the fruit with syrup containing acid. Result, a terrible struggle to get the customers to believe that it was a mistake, and that he knew how to prevent a similar error next time. But no! customers wanted the bottled mineral waters, and the dream of a lifetime became the burden of his soul. And this is not the only pitfall that awaits a careless trader, even if he does read directions.



An 8-ft. Clear Service Fountain, Finished in Mahogany.

Perhaps the best way to advise traders how to run a soda fountain is to condense the information and advice in short sentences, as was done in connection with wholesale ice cream in a previous article.

Do not treat it too much like a machine, in a rough and ready manner, but as an artistic advertisement, likely to be, as it generally is, the finest advertisement in your shop and your finest money-getter.

Have all your supplies purchased and ready in such a way that the fountain will not be "closed" for hours just when the rush comes to spend money at it.

Either run it yourself and see to everything connected with it, or place it in the hands of a trusted and smart assistant, giving him (or her) a bonus on the profits and satisfactory result of same.

Go over every part of the fountain as much as possible so as to prevent breakages, leaks, putrefaction of goods, and so on.

As soon as you notice that something is wrong, mend it at once. One thing leads to another very quickly, and the result is chaos and loss.

Keep the fountain (top, bottom, inside and outside) scrupulously clean; wash out the milk and syrup pumps, the disher jar, etc., every night without fail. Make sure that there remains nothing that smells or is likely to cause a smell.

See that every assistant at the fountain, yourself included, if you serve, wears clean white jackets or smocks, has clean, dry boots or shoes, and looks attractive. Forbid slovenliness emphatically and bluntly, and prevent the splashing of water, etc.

See that the soda water is as cold as possible, not only because it incorporates the gas better, but also because customers expect a cold drink, not a lukewarm one.

Start claiming that you have the best ice cream and the purest and freshest drink in the town and stick to the statement, but make sure that you can prove it.

Make sure that everything, from spoons to glass-holders, from pumps to mirrors and windows, is polished before customers are served.

Remember you are dealing with foodstuffs. Do not let the faintest suspicion of metal polish, soap, disinfectant, etc., become incorporated with the flavours.

Ice cream, milk, sweet, sugary syrups, etc., leave unpleasant smells behind them; plenty of hot soda water, and then clean, fresh water every night is the best remedy, especially in the corners.

Marble and onyx should be washed in hot water every day and dried to a polish. This is much better than using scratchy soaps, soda, etc. And with so much acid, phosphates, etc., in the drinks one must not expect to have one's marble eternally new. However, attention saves a good deal.

Mirrors, windows, silver-plated pumps, etc., are best cleaned with water containing a little whiting. Allow to dry, and then polish with a soft cloth.

Silverware should be kept spotlessly clean. The best method is to remove all traces of grease, etc., with plenty of warm water, and then polish with a good silver polish or rouge, such as 2 ozs. liquid ammonia, 2 ozs. alcohol, 8 ozs. water and a lump of whiting, mixing all thoroughly and placing in a bottle for use with a soft cloth.

Make sure that everything is seen by customers and by yourself in its best, brightest and shiniest condition. Cleanliness helps to preserve things.

Have as many spare pumps and parts as possible, so that the others can be repaired and repolished at once before they go to ruin. It is cheaper in the long run.

Acquire a reputation for the shiniest glasses and the cleanest tables in your town, besides the quality of ice cream, drinks, etc.

Do your very best to ensure that each glass and spoon is first washed in hot soda-water and then in fresh running water, allowed to dry a little, and then polished up with clean, soft towels kept for that one purpose.

Glasses, cups, spoons, etc., that have become smeared with milk should first be rinsed in cold water so as to prevent the film adhering to them and time being lost in washing and polishing them once the film has formed.

Never allow the assistants to touch with their fingers or hands anything that the customers eat or drink, or anything likely to come in contact with the customers' lips. This is considered the most important rule in all successful soda fountains, even where straws are supplied with each drink.

If you know or feel that you cannot cope with the demand of clean glasses, start using the hygienic paper-glasses and cups. These are very successful in America and elsewhere, and appeal to fastidious clients.

Make sure that the assistants keep their hands and fingers as dry as possible, and that tables, chairs, counters, etc., are clean and free from grease and wet. Dripping hands have never attracted customers to foods.

Do not allow flirting, long conversations, appointments, etc., at the fountain. The last two should only be tolerated at the tables, and hardly concern you; the first does, and will make your profits flit away.

Assist your fountain sales by beautiful window displays. Imitation ices, drinks, bowls of fruit, etc., make the mouths of passers-by water; that means custom for you, as do artistic coloured illustrations of drinks, etc.

Enthuse, convince and hypnotise yourself to the fact that you have *the* soda fountain of the town, that it is being run perfectly, and that each customer is getting the best quality, quantity and service possible. This is the only way.

* * *

Chapter XV.—Syrup Making.

The foundation of successful and profitable soda fountain trade is, apart from fresh and *cold* soda water, the purity, freshness and flavour of the syrups. The ice cream, of course, should be prepared, frozen, and stored in the fountain in the best possible manner; it should be hard and cold. The soda water should be such that, apart from being gassy, *i.e.*, properly charged with CO^2 gas from the cylinder, and kept gassy in the carbonator, be it electric and automatic or hand-operated, the pipe from the carbonator to the draught arm, or at least that part of the pipe that is in the soda fountain, should be surrounded with ice or brine, so that the soda water will come out cold. If you use the brine system, make sure that it will not freeze the pipes and burst them. Salt should never be added to the ice (excepting round the ice cream container, of course), otherwise, like a strong brine, it will freeze pipes and soda water and make a big hole in your pocket, besides disorganising your fountain sales until mended.

The syrup is probably the most important thing, as I have already hinted, and every attention should be given to the ingredients, manufacture and storage till sold at the fountain. If you are careful of the flavour of all your other goods, be doubly careful of your syrups.

As absolute care and cleanliness are essential, it is preferable that they be made by a specially selected person and in a room set apart, away from other ingredients that may give a foreign flavour to them, such as coffee, vanilla, pepper, ginger, etc. It is bad enough to see syrups deteriorate through bacteria, spores, etc., without adding to the danger and loss by carelessness in the syrup room.

Now to the making, of which there are various methods, each requiring exact measurements, so place yourself in a critical mood if you wish to make a success of it.

A real fruit syrup would mean fruit (crushed), sugar, and water, but not every trader can go in for this type, neither is it to be recommended to him at first unless he wishes to purchase the crushed fruits from one of the many firms now dealing in them and add the simple syrup to them. This is, of course, the happy mean between boiling one's own fruits and making the syrups from essences, and is probably the most extensively used; but as essences are also used for winter cordials, I think my reader will prefer to learn this method of making syrups first.

There are good points in the various methods of making them thus—*i.e.*, distilled water that has been allowed to get cold, cold water, warm water, boiling water. The most usual is to allow the water and sugar to reach boiling point, or so to make sure that the sugar, stirred repeatedly, is thoroughly dissolved, but the use of invert sugar is gradually becoming more general over here.

INVERT SUGAR.

100 lbs. sugar.
44 lbs. water.
50 grams tartaric acid.

These quantities may be reduced or increased in proportion.

Allow all this to boil for *not* more than thirty minutes, otherwise it will become dark. This will give 140 lbs. or so of a sweetening mass containing only 71.4 per cent. of actual sugar, but is, strange to say, just as sweet and better for ice cream and syrup making as 140 lbs. of sugar.

If you do not wish to use invert sugar (but I do not see why you should not, as all syrups must contain those three ingredients), place 4 gallons of water in a tinned copper boiler, saucepan or cooker, with at least 32 lbs. of best sugar, stirring occasionally. As soon as the sugar is dissolved or the water is reaching boiling point, remove from the fire or gas, and strain the lot in one or more enamel pails or similar utensils that will stand the action of tartaric acid, which is to be added to the simple syrup while hot or warm. Separate pails are advisable, so that one can make the various flavours straight away.

To obtain a perfectly clear syrup, which is more than advisable, some go one better than the simple straining; they beat up the whites of one or two eggs and add this to the water and sugar in the saucepan. It is a well-known fact that this albumen collects all the impurities, scum, etc., in the water and sugar, especially if allowed to boil for a minute or two and is strained off. Do as you think best.

Another method of making the syrups is to allow the sugar to dissolve in cold water. This syrup will keep longer than the one made with boiling or hot water, but takes more time to make.

In the States they also use another method—the percolation method. A wooden tub or non-tasting metal container is kept going practically continuously, more water and sugar being added in the top as the syrup gradually drips from the tap through a felt filter bag. But one has to be very careful that the syrup is of the same "strength" (sweetness) throughout, otherwise one lot that is taken to the syrup room or fountain is extra sweet and another lacks sugar. One can smile at the possibilities of one day's customers saying that the drinks are too sweet and another lot accusing the dispenser of stealing the proprietor's sugar to take it home!

Many traders thicken and cheapen their syrups by replacing some of the sugar with glucose, and even saccharine. Stick to sugar if your object is to advertise the best possible drinks. However, here are the instructions for those who may wish to try this other method, remembering that refined saccharine is 500 times sweeter than sugar, pure saccharine 300 times, and glucose (grape sugar) ¾, *i.e.*, 12 lbs. of glucose must be used to replace 9 lbs. of sugar. Some traders therefore use a little of each. There is the hot process saccharine and the cold process. Saccharine will not dissolve in the presence of acid.

Instead of using	use	and
28 lbs. of sugar	11½ lbs. of sugar	½ oz. of saccharine
56 lbs. of sugar	22½ lbs. of sugar	1 oz. of saccharine.

That is to say, a good syrup can be made with 4 gallons of water, 11½ lbs. sugar, and ½ oz. saccharine.

Glucose is used thus: To make 3 gallons of syrup, add ½ gallon of glucose to 1 gallon of water and 1½ gallons of syrup (sugar and water), and you have an equivalent to

6 lbs. sugar, ½ gallon glucose, and just over 2 gallons of water.

In general use, 4½ gallons of glucose, 4½ gallons of hot water, and 1 oz. saccharine will make a good syrup.

While the syrup is still warm, tartaric acid is added. This acid is sold in liquid, lump, powder, and crystal form; the best is the crystal. To each gallon of plain syrup one must add from ½ oz. to 2 ozs., according to the flavour of fruit one is making, and as no mistakes are permissible with acid (as the result will make or lose a customer, and a few hundred customers at that!), the best method is to boil down the tartaric acid with a known quantity of water until thoroughly dissolved, and keep it in a bottle, adding, say, two ounces of this water for every half ounce of tartaric acid that is called for in the recipe.

Some makers of syrup generally boil ½ oz. of acid with every gallon of water added to the sugar; in other words, they make an invert sugar, and then add more acid according to the recipe being dealt with. But it is better to add the acid afterwards, the proper amount at the proper moment. It is poured into the warm or hot syrup and stirred vigorously, so that the biting or bitter flavour is evenly distributed in the syrup. When the syrup has cooled, the colouring (if necessary) is added, then the essence, stirring well to prevent uneven distribution, and then finally the French cream or other foam, the preservative, etc.

By looking over the catalogues and price lists of the various essence distillers one can find many odds and ends used in the manufacture of drinks.

Once made, the flavoured syrups should be stored in enamel, stone or glass containers—away from odorous articles, flies, heat, and even light. Many essences are ruined by being placed in warm and sunny, or even light, rooms. The cooler and darker the place the better. Any book on chemistry as applied to essential oils, etc., will explain why.

I will not take up space with long descriptions of syrups made with crushed fruit, as each gallon jar of these contains directions for mixing with simple syrup, with or without acid, or with directions for purchasing your own fruits, boiling and preparing them, and so on. I may, however, mention these later on; for the present I will give carefully prepared recipes for making fine quality soda fountain syrups, much better than those hitherto published in any book I have perused. *Experientia docet.*

In dealing with lemon flavours, it should be noted that citric acid, which is a by-product of the lemon fruit, is even better than tartaric acid. But the average trader prefers to have tartaric acid for all his syrups. Another matter that needs mentioning is that not every firm of essence distillers make the same strength, and as they generally run more than one grade of each flavour it is difficult to state clearly what essence is advised without mentioning firms by name, which is not in my programme. However, if one purchases the best essences from the best firms and studies their recipes attentively, and compares them with the following recipes, he will surely get the right thing soon. Quantities should, of course, be altered in proportion to suit one's trade.

LEMON No. 1.

2 gallons simple syrup.
3½ ozs. citric acid.
2 ozs. soluble essence of lemon.
1-16th oz. French cream.
Colour if desired.

Preservative, according to instructions on bottle, if the syrup is likely to last a long time in hot weather.

LEMON No. 2 (Recommended).

2 gallons simple syrup.
6 ozs. tartaric acid.
½ oz. essence of lime.
3½ ozs. essence of lemon.
1-16th oz. French cream.
Colour if desired.

LIMEADE.

2 gallons simple syrup.
8 ozs. tartaric acid.
3 ozs. essence of lime
1-16th oz. French cream
⅛ oz. lemon colouring.
Preservative.

LEMON SQUASH.

2 gallons simple syrup.
6 ozs. tartaric acid.
6 ozs. essence of lemon squash.
¼ oz. lemon colouring.
1-16th oz. French cream.
Preservative.

LIME JUICE AND SODA.

2 gallons simple syrup.
5 ozs. citric acid.
3 ozs. essence of lime juice and soda.
½ oz. French cream.
Slight lemon colour.
Preservative.

ORANGEADE.

2 gallons simple syrup.
4 ozs. tartaric acid.
3 ozs. essence of orange.
2 ozs. orange colouring.
½ oz. French cream.
Preservative.

KAOLA.

2 gallons simple syrup.
7 ozs. tartaric acid.
6 ozs. essence of kaola.
¾ gill caramel (burnt sugar).
1-16th oz. French cream.
Preservative.

PINEAPPLEADE.

2 gallons simple syrup.
4 ozs. tartaric acid.
½ oz. golden caramel (colouring).
2 drachms concentrated essence of pineapple.*
½ oz. French cream.
Preservative.

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* Pineapple essence is always very strong, and care should be taken in making syrups with it.

CHOCOLATE No. 1.

2 gallons simple syrup.
3 ozs. tartaric acid.
1 oz. caramel colouring.
4 ozs. essence of chocolate.
½ oz. French cream.
Preservative.

CHOCOLATE No. 2.

(Must be boiled together.)

4 qts. water.
4 lbs. sugar.
1½ lbs. good cocoa.
Allow to cool and place in jars.

COFFEE No. 1.

2 gallons simple syrup.
3 ozs. tartaric acid.
1 oz. caramel or other colouring.
2 ozs. concentrated essence of coffee.
½ oz. French cream.
Preservative.

COFFEE No. 2.

(Must be boiled and strained.)

4 qts. water.
1½ lbs. fresh roasted coffee.
10 lbs. sugar.

GINGER ALE.

2 gallons simple syrup.
4 ozs. tartaric acid.
3½ ozs. essence of ginger ale.
1½ ozs. colouring.
½ oz. French cream.
Preservative.

GINGER BEER.

2 gallons simple syrup.
4 ozs. tartaric acid.
1 oz. essence of ginger beer.
½ oz. French cream.
Preservative.

This should be strong enough, but if required stronger add 2 drachms of soluble essence of capsicine, paying attention to same, as it is of a very powerful strength.

Raspberry.

2 gallons simple syrup.
3 ozs. tartaric acid.
1¾ oz. raspberry colouring.
1 oz. concentrated essence of raspberry.
½ oz. French cream.
Preservative.

Strawberry.

2 gallons simple syrup.
3 ozs. tartaric acid.
1½ ozs. strawberry colouring.
½ oz. concentrated essence of strawberry.
½ oz. French cream.
Preservative.

Hundreds of other syrups can be made in a similar manner.

The preceding recipes and instructions, if carefully followed, should give the soda fountain owner the best results possible—that is to say, so far as essence-made syrups are concerned. He knows quite well that he can go one better and purchase the crushed fruits in jars and dilute them, as per instructions on the jars, with three or four times the volume of simple syrup. Providing he purchases the best quality fruits, generally obtained in America from the firms who supply the fountains, he can rest assured of a really fine drink for his customers, which is a matter of duty as well as satisfaction.

The other method is to make the syrups with preserved or fresh fruit rather than use fruit-flavoured essences. And no one can deny that this method is the best for a high-class fountain, where price is of secondary importance. Admitted that when fruits are in season and plentiful, the final cost cannot be high—in fact, it may turn out to be cheaper than other methods; but the feeling in the trade is that essences have sold so much not only because of the time and patience required to make syrups from fruits, but also because they are cheaper, when the whole year is considered.

Syrups from Fruit.

In season, as I have stated before, fresh fruit is preferable to syrups, and the following recipes should be clear enough for the owner of a fountain to give his customers something luscious.

Strawberries, of course, are first favourites with the public. You should pay attention to the buying of the quality of strawberries that will give the best syrup; these are the little dark strawberries, mature and soft, but not over-ripe. Wash thoroughly to remove any trace of sand or dirt, remove any decayed part and the stems, and then crush the berries, or pass them through a chopper, but not too finely. Add to all this as much granulated sugar as the mass will absorb, mix thoroughly until dissolved, and then add three times the amount of simple syrup. It is to be understood that the strawberries and the simple syrup (sugar and water) are just as good, in fact, better, than the previous ingredients for making a strawberry syrup. A little lemon juice brings out the flavour of strawberry, and is preferable to acid, but you are advised to experiment and please your patrons.

The strength of this fruit-made syrup will depend on the price you get for the drinks made with it. One must remember that the average portion of syrup placed in a half-pint glass is 1 or 1½ ozs. If you get 6d. for a drink, it pays you only to add 1 gallon of plain syrup to 1 gallon of crushed strawberries; if you get less, it stands to reason that you will add 2, 3, and even 4 gallons of plain syrup to the fruit. But never forget that the customer knows nothing about this, and does not wish to know it; all he or she wants is a tasty drink, so mind you do not give him a watery concoction, less attractive than the drink served at other fountains in your town.

If you are using the strawberry syrup on sundaes, etc., it should be thick and tasty, not diluted too much with syrup. This can be done by placing some apart, in special display bowls, before diluting too much, but the customer is to obtain a quick service by placing the syrups in the appropriate jars along the top of the fountain and pumping them on the sundaes or in the drinks.

Fresh raspberries and blackberries are never passed through a chopper. Wash and pick them carefully, mash

them well with granulated sugar, and dilute the mass with plain syrup.

Peaches should be ripe, and with a good flavour. Peel and stone them, pass through a chopper, or mash them with sugar, and dilute with simple syrup. Sliced peaches are preferable, as are sliced apricots, which are prepared in the same manner.

Pineapples are peeled, the eyes are removed, and then grated, sliced, or cut into cubes, or pulped, or even run through a chopper, which is preferable. They are then covered with granulated sugar, allowed to soak a few hours, and then more sugar is added until the natural juice is absorbed. After this the simple syrup is added, as with other fruits. Pineapple cubes in tins are generally diluted with a similar amount of syrup; whole pineapples are chopped, sugar is added to the proportion of 14 ozs. of sugar to the quart tin, and then the syrup.

Bananas are peeled, pulped finely, even to the extent of whipping them in a cream whipper, sugared, and then a little syrup is added. As they turn dark when exposed to the air, it is safer to make only small quantities at a time. Another method is to add 6 gallons of syrup to 12 bananas, or slice them and cover them with sugar before adding a little syrup.

There are so many varieties of cherries that it pays to purchase the best for soda fountain use—*i.e.*, the dark, juicy variety. Remove the stems and stones, halve or crush them, and cover with granulated sugar (until absorbed) two or three times. Then add the simple syrup. Maraschino cherries are better for display on sundaes than in drinks, as they possess very little flavour, unless essence of maraschino or bitter almonds is added.

Orange juice is being marketed in so many ways and advertised so extensively that it is problematical whether traders will be bothering about making orange syrups when they can get the real Californian article at low prices. However, for those who wish to, here is a good recipe: Get large, juicy oranges, and carefully grate the outside peel with lumps of sugar to absorb the oil, add water to the sugar, and strain through a cheese cloth. Then get one gallon jar for every six oranges, peel these, and cut the fruit into thin strips, and place them equally in the

jars, adding a proportion of the juice from the rind. Fill the jars with simple syrup, and you have an orange syrup your customers will come for again and again.

Combination Syrups.

Apart from the above one-fruit syrups, there is an extensive use of combinations of various flavours into one drink, sometimes with a combined name, such as Vanberry, which includes strawberry and vanilla; at other times with a new name, generally ridiculous and non-descriptive. My advice to the fountain owner is to decide once for all whether he thinks the best way to grip the public is by means of descriptive names or by "stunt" names that mystify the public, but, playing on the monkey's trait of imitation and curiosity that is always with us, attracts them all the same. My advice is to play the simple game—in fact, I will not even give any names for the following combinations of flavours, leaving each trader to pick out the name he thinks will fit best. At a pinch even an idiotic name will do.

1.

Raspberry juice, 8 ozs.; white grape juice, 8 ozs.; vanilla extract, ½ oz.; fruit acid, 1 oz.; simple syrup, 6½ pints. Mix thoroughly.

2.

Two pints each of pineapple, strawberry, and vanilla syrup, 1 oz. essence of orange, 1 oz. fruit acid, and mix thoroughly.

3.

Four ounces each of orange, lemon, orgeat, and cinnamon syrup, 8 ozs. of acid phosphate, 1½ pints of blackberry juice, and 5 pints of simple syrup.

4.

Pineapple syrup, 2 pints; strawberry syrup, 1 pint; orange syrup, 1 pint; white grape juice, 4 ozs.; fruit acid, ½ oz.

As there are a few hundred of these recipes collected here and there, I will spare my reader's feelings and leave him to concoct his own combination syrups, with the advice that, as care must be taken in concocting new sundaes so that the flavours blend, so also is care necessary with these syrups. The flavour that goes to the customer is the thing that matters.

Syrup Statistics, etc.

This title may seem odd, but it is intended to group up some of the many odds and ends connected with syrup-making. The most important items are the Twaddle's saccharometer, or "sugar thermometer," as it is erroneously called by some in the trade, and the solubility of gas in water.

The colder the water the more it will absorb gas, which is composed, roughly, of three parts of oxygen and one part of carbon, and is made from the action of sulphuric acid on whiting, chalk, or marble, or bicarbonate of soda.

At a temperature of		Volumes of gas.
32° Fahr.	.. water will absorb ...	1·80
40° ,,	... " " " ...	1·54
50° ,,	... " " " ...	1·25
60° ,,	... " " " ...	0·96

So you can see that the colder the water that enters the carbonator the more gassy the drink you can give to your customer. It is the little matter of this kind that makes tons of difference to the sales at a fountain.

Regarding the Twaddle measurements, there is no denying that a trader who makes his syrups from the purest ingredients, and pays special attention to every detail, hardly requires "figures all round him." But there always comes a time when he must be sure of measurements and be precise, especially when something goes wrong and he requires assistance in rectifying the complaint. He must then measure things, just as a doctor uses a thermometer to assure himself of the patient's temperature.

Were a trader asked, for instance, to be exact on the percentage of sugar and the weight of one gallon of syrup made from 10 lbs. of sugar and 1 gallon and 7 ozs. of cold water, and how this is compared with 10 lbs. of sugar and 1 gallon and 26½ ozs. of water, all allowed to boil, and what was the specific gravity of same compared with plain water, could he give the right answer? He has probably mastered the percentages of fat, sugar, and solids in ice cream; he should master a few figures on syrups.

The above-mentioned figures are for the usual "strength" of syrups used in the trade, and represent a density of 1,225 (plain water is 1,000 always), and consequently 45 deg. on Twaddle's saccharometer, and contains 6 lbs. of sugar in every gallon of syrup, the rest being water. The weight of 1 gallon of water, as everyone knows, is 10 lbs. The above gallon of syrup contains, in precise figures, 5 pints and 4 ozs. of water—*i.e.*, 6 lbs. 8 ozs. of water and 5 lbs. 12 ozs. of sugar—and weighs altogether 12 lbs. 4 ozs.

To help the trader to remember the "statistics" of each gallon of syrup, here are a few lines from the well-known chart on this subject:—

Twaddles. Degrees.	Specific Gravity.	Avoird. Weight of Sugar.	Fluid ozs. of Water.
20 ...	1,100 ...	2 lbs. 10 ozs. ...	134
25 ...	1,125 ...	3 lbs. 4 ozs. ...	128
30 ...	1,150 ...	3 lbs. 14 ozs. ...	122
35 ...	1,175 ...	4 lbs. 8 ozs. ...	116
40 ...	1,200 ...	5 lbs. 2 ozs. ...	110
45 ...	1,225 ...	5 lbs. 12 ozs. ...	104
50 ...	1,250 ...	6 lbs. 6 ozs. ...	98
55 ...	1,275 ...	7 lbs. 0 ozs. ...	92
60 ...	1,300 ...	7 lbs. 10 ozs. ...	86

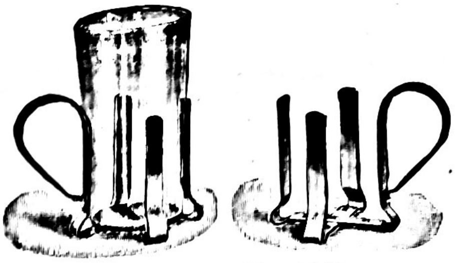
To find the weight per gallon, divide the specific gravity by 10.

All that remains to be said is that, by measuring out 1½ ozs. of syrup to each glass, one gallon will make nine dozen—*i.e.*, 108 drinks. Calculate your profits by figuring the cost of syrup, soda water, ice cream, fruits, and so on. And please remember that exact calculations are impossible until the assistants have mastered the only way of making a profit at fountains—no splashing, no waste, no breakages! Everyone knows this in theory, but not five in a hundred know it in practice. Result: Less profits and more language!

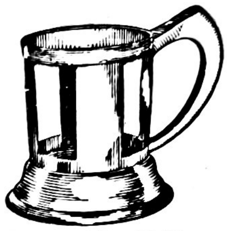
And, by the way, what does an ice cream soda actually cost you?

Chapter XVI.—Serving Drinks.

There is one great difficulty in serving drinks. No matter how exact you are in the preparation of them, you will always find customers here and there who will tell you that they are too sweet, or not sweet enough, or too tasty, and so on. Take as little notice as you can of these (without letting them see you adopt this attitude, of course), but make sure you please the majority. A large fountain, or a fountain doing a roaring trade, can well go in for those little odds and ends in flavours and special drinks that are likely to cater for these persons of superhuman throats, but a small trade can be loaded with expenses and losses if special goods are made for every Tom, Dick, or Harry who comes in and dictates on flavours and what not.

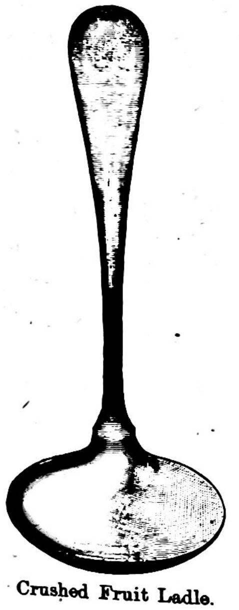


Adjustable Soda Glass Holder.

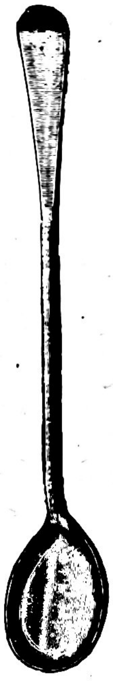


Soda Glass Holder.

If you have made a good, sweet syrup with plenty of flavour and the right proportion of acid in it, and if the soda water is cold and gassy, you will find that 1½ ozs. of syrup pumped in the bottom of the glass and a good strong stream of soda water is all that is wanted to give the customer a perfect drink, thoroughly mixed, and so on.

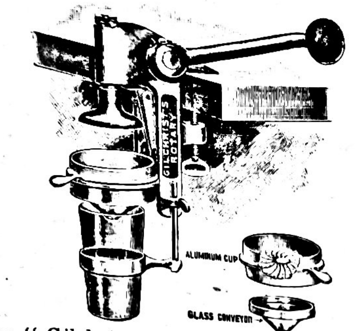


Crushed Fruit Ladle.

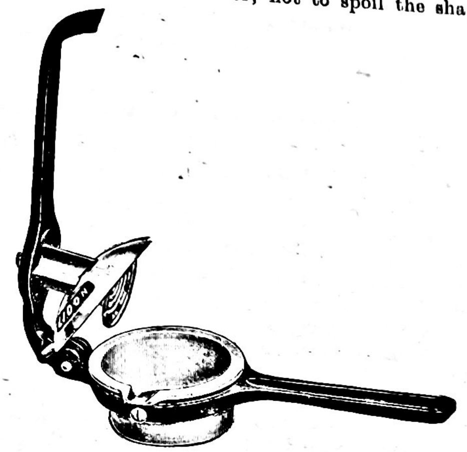


Soda Spoon.

An ice cream soda is best served thus: First, the syrup is pumped into the glass, nicely and quickly, with one action of the right hand, if possible; then, still holding the glass with the left hand, a scoop of ice cream is placed in it without smearing the sides. Hold the glass a little



The " Gilchrist " Rotary Lemon Squeezer.



The " Lidon " Lemon Squeezer.

slantingly, so that the ice cream will go a little on one side, and then turn the soda water full on in the syrup so that it mixes well, trying, however, not to spoil the shape of the ice cream, or else run it in on the side of the glass, always about ½ inch above the level of the syrup. When the glass is filled according to custom—*i.e.*, about 1½ inches from the top—stop the thick stream of soda water and turn on the fine stream. This is operated by means of the same handle, but varies according to the make of soda fountains—*i.e.*, in some you turn the handle the other way, in others you turn a smaller tap connected with the larger one. However, it merely requires two or three seconds (not more) of this powerful jet of soda water in the drink to mix it thoroughly and give it a nice frothy head, which is a necessary attraction.

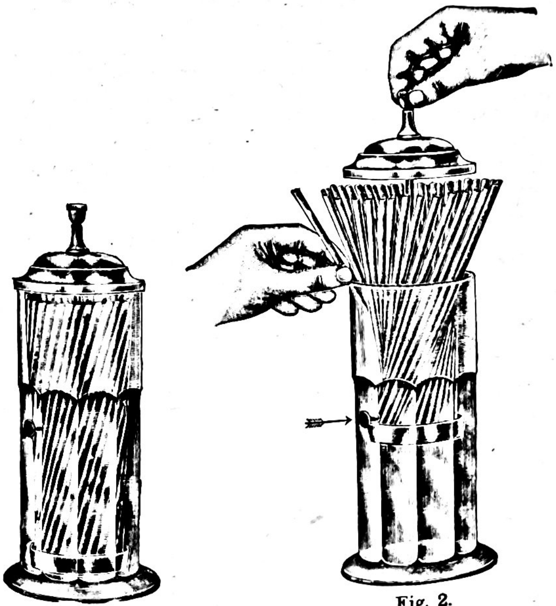


Fig. 1. Fig. 2.

The " Gilchrist " Sanitary Soda Straw Dispenser.

Of course, there are various ramifications of the above method of serving an ice cream soda, and one can take it for granted that each trader picks up traits and customs, good and bad, as he gets along. It will pay him, however, to pay an occasional visit to fountains being run by trained dispensers and watch their methods. It is doubtful whether he returns to his own without having learned something useful.

When cream or marshmallow is added to a soda fountain drink it is generally placed in the glass just after the syrup, so that it gets mixed. I have seen the drinks look more attractive, however, by having the marshmallow or cream placed *after* the syrup, ice cream, soda water, and fruits.

Always serve two clean straws with every drink, or place the straw holders where the customers can see them.

◆

Chapter XVII.—Dictionary of Fountain Terms.

Straight Soda.—Carbonated water (known as soda water or aerated water) and syrup.

Cream Soda.—Carbonated water, milk, and syrup.

Ice Cream Soda.—Carbonated water, ice cream, and syrup.

Punch.—Carbonated water, syrups, fruits, and grated peel, generally kept in special display bowls, and ice cold.

Ades.—Carbonated water, fruit juice, powdered sugar or syrup, and sometimes slices of fruit. A golden ade contains the yolk of an egg, before shaking.

Float.—An ade, with a layer of grape juice or ginger ale floating on top. An ice cream float or sherbet float means an ade containing sherbet or ice cream.

Freeze.—An ade or punch with shaved ice and fruit, a sprig of mint, etc.

Smash.—Similar to freeze, generally much sweeter, with dashes of phosphate acid.

Fizz.—Carbonated water, acid syrups, such as lemon or lime juice bitters, and made to effervesce with sodium bicarbonate or quick dashes of the fine stream. A silver fizz contains the white of an egg, and is shaken in a shaker; a golden fizz contains the yolk of an egg.

Cup.—Such as grape cup or claret cup. Fruit juice or syrup, shaved ice, lime juice, etc., and carbonated water.

Phosphates.—Syrup or syrups, dashes of acid phosphate and soda water. An egg phosphate is the above, with an egg added to it, and the drink is then shaken in the shaker.

Rickey.—Syrup, the juice of one lime, and soda water. Never shaken.

Bitters, Shake or Cocktail.—Syrup, soda water, and a dash or two of bitters, such as Angostura, wild cherry, etc.

Shake.—Syrup or syrups, with or without acid phosphate, shaved ice, plain water, shaken and strained and filled with soda water. An ice cream shake contains ice cream, but no acid. A milk shake is similar, but with milk instead of ice cream, and an egg shake is a milk shake with an egg added.

Nogg.—Egg, milk or cream, sugar, a non-acid aromatic flavour, well shaken together, and grated nutmeg or cinnamon sprinkled over the top. (Served hot or cold.)

Puff.—Syrup or syrups, whipped cream or ice cream, the white of an egg, and shaken together. Then the fine stream is added to it, and a maraschino cherry placed on the top.

Root Beer.—Non-alcoholic beverages, such as sarsaparilla, coca-cola, generally carbonated in special casks or containers, and served on the fountain. There is a tremendous demand for these drinks in the States.

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SECTION V.—PHOSPHATES, BITTERS, EGG DRINKS, ETC.

Modern salesmanship no longer depends on specialising in one or two well-known lines. There is an ever-increasing necessity for widening the range of one's lines, and for the soda fountain owner running heaps of drinks this means having extra advertisement slips on his mirrors and walls, and so on. There is really little necessity for all these adjuncts to the fountain menu; very few over here take naturally to these concoctions. They fancy (or fancy that they fancy) every now and then something different, and away goes their imagination and the shopkeeper's trait of offering something different, and that is how the snowball grows.

These drinks never sell as much as the ordinary ice cream sodas, but here are some recipes, if you wish to add them to your fountain.

Chapter XVIII.—Phosphates.

Angostura.—1 teaspoonful of angostura bitters to a strong lemon drink.

Arctic Phosphate.—Strawberry syrup ½ oz., pineapple syrup ½ oz., vanilla syrup ½ oz., orange syrup ½ oz., acid phosphate 3 dashes, cracked or shaved ice ½ glass, and fill with soda water. Place a spoon and 2 straws in the glass.

Celery White Cap.—½ oz. each of celery, orange and lemon syrup, the white of an egg, a dash of acid phosphate, ¼ glass of cracked ice. Place all this in the shaker, shake, strain, and serve in clean glass. Spoon.

Fraternity.—1½ ozs. champagne phosphate, 1 oz. lime syrup, ½ oz. lemon syrup, ¼ glass shaved ice. Decorate with pineapple or cherries, and serve in a large glass. Spoon.

Frost Bite.—Fill a small glass with shaved ice, 3 dashes of acid phosphate. Pour in orange or other syrup until it reaches the level of the ice. Spoon.

Hiawatha.—½ oz. each of cherry and orange syrups, 1 oz. of pineapple syrup, 6 dashes of acid phosphate, cracked ice, and soda water.

Manhatten.—½ oz. lime syrup, 1 dash acid phosphate, 2 dashes of Angostura bitters, 2 ozs. grape juice, 1 dash sherry wine, 2 teaspoonfuls powdered sugar, and ¼ glass cracked ice. Fill a 10-oz. glass, and decorate with orange and pineapple.

Mexican Rebel.—1 oz. of strawberry syrup and 1 of orange syrup, a dash of phosphate and one of capsicum, ¼ glass of ice, and then soda water.

Sunshine.—1 oz. pineapple syrup, ¼ oz. raspberry syrup, 1 dash lemon juice, 2 dashes acid phosphate, and then soda water.

Thirst Quencher.—2 ozs. raspberry syrup, 1 dram acid phosphate, juice of half a lemon, 2 ozs. shaved ice, 8 ozs. water. Shake well, and then pour into a large glass, adding more water.

EGG PHOSPHATES.

Egg phosphates differ from the others to the extent that an egg is added to the recipe, and a few words on the serving of egg drinks are very appropriate here.

Make sure, in the true meaning of the word, that the eggs are fresh and large. A bowl of small eggs on the fountain counter can never attract as much as large eggs, however clean you keep them and the bowl. Buy them in small quantities, and make sure that they are fresh. Return or use in some other way any that are cracked or unsightly.

Always face the customer when serving egg drinks; never give an opportunity to make him suspect that he is going to get something second or third-rate. Rest the glass on the counter, hold the egg firmly with the thumb and first two fingers of the right hand and crack it over the side of the glass. Widen the crack with a motion of the fingers and the empty shell will be left in your hand. With a quick glance at the egg, make sure all is well with it, and

then place the shaker over the glass tightly and then invert them. Shake well and firmly, but as gracefully as you can, giving the impression to the customers that you are using thumbs and fingers, not the brutal strength of hands and wrists. When the drink is well shaken, remove the glass (without the drink in it) with your right hand and place it near the wash-up, and you have the shaker containing the ingredients in your left hand, ready for extra ingredients, or soda water, etc., before pouring into a clean glass.

Board of Trade.—1 oz. each of *crème de menthe* and pineapple syrups, ½ oz. lemon syrup, 2 dashes of acid phosphate, and 1 egg. Shake well, fill the glass with soda water. Straws and spoon.

Cherry Egg.—1½ ozs. cherry syrup, dash of acid phosphate, 2 ozs. shaved ice, and 1 egg. Shake well, fill glass with soda water, and add grated nutmeg.

Famosa.—1 egg, 1 oz. raspberry syrup, 1 oz. sweet cream, 1 dash essence of ginger, 2 teaspoonfuls of crushed ice. Shake well, and pour from one glass to another a few times.

Gold Mine.—1 egg, 1½ ozs. orangeade syrup, dash of port wine syrup, dash of acid phosphate, 1 measure of vanilla ice cream, soda water.

The above recipes will give the reader some idea of the hundreds that are sold in America. To go through the whole collection (if they have ever been collected) would be tedious in the extreme. One recipe and a little imagination is as good as the whole lot, especially the names!

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Chapter XIX.—Bitters and Rickeys.

Here are some of the less idiotic recipes and names:—

Blaze Du Barry.—½ oz. lemon syrup, 1 dram lemon juice, 1 dram Angostura bitters, fill with soda water three-fourths of the glass, add 1 teaspoonful of powdered sugar and stir. The customer should drink while it is effervescent.

Capitol.—1 oz. blood orange syrup, ½ oz. grape juice, ½ oz. sherry syrup, 1 dash Angostura bitters. Shake well, and fill with soda water. Straws.

Cherry Cocktail.—1 oz. cherry juice, 2 ozs. lemon juice, 1 dram Angostura bitters, 1 teaspoonful powdered sugar, ¼ glass shaved ice, 2 ozs. soda water. Shake, strain, add 1 cherry, squeeze the juice from a piece of lemon, add water.

Festival Fizz.—½ oz. rose syrup, ½ oz. lemon juice, 1 oz. pineapple syrup, 1 dash Angostura bitters, shaved ice, soda water, and a slice of orange and a cherry.

And so on *ad infinitum*.

Rickeys.

Ambrosia.—The juice of 1 lime, 1 oz. ambrosia syrup, ½ glass of shaved ice, soda water. Straws.

Boston.—1½ ozs. grape juice, juice of 1 lime, 3 dashes of Angostura bitters, 2 dashes of acid phosphate, a dash of sherry, and enough simple syrup to sweeten. Then ⅓ glass of shaved ice and soda water. Spoon and 2 straws.

Chicago.—½ oz. raspberry syrup, 1 oz. pineapple syrup, 1 dram lime juice, 1 oz. grape juice, 2 drams lemon juice. All this in a glass containing shaved ice, then soda water.

Golden Gate.—1 oz. blood orange syrup, 1 dram lime juice, soda water.

The above are sufficient for the trader to make up others.

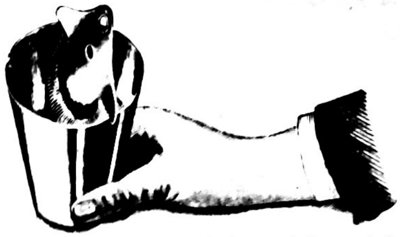
Chapter XX.—Shakes and Egg Drinks.

A little advice before we come to the recipes. These drinks are very nourishing, and are looked upon as liquid lunches. Run them well, mix the egg, milk, etc., properly by using the neat electric mixers that are used at all fountains, excepting the smallest, poorest, or most neglected. They are neat little silver-looking affairs connected to the electric light; you notice a very small motor encased in a silver-plated box at the top, and a silver rod. The ingredients are poured into a glass and placed under the mixer, so that the rod rests in the centre of the glass. By switching on the electricity the rod revolves at a terrific speed, and mixes the drink to a froth. It is this perfection of the mixing that appeals to the customer. There are also small hand-mixers on the market.

All these drinks (milk shake, egg milk shake, malted milk shake, egg malted milk shake, egg chocolate malted milk shake, etc.) should be served cold, and with a couple of crispy, salty biscuits or crackers on the same plate on which you rest the glass. Some traders get over the difficulty of ensuring a cold drink by adding a little ice cream to the drink, but far better and cheaper than this is to keep your milk cold, either in bowls embedded in the fountain, so that the ice or brine coils come in contact with the bowl, or else in one of the syrup jars. By regulating the pump one can get a measured amount of milk at each pressure, just as one can get ½ oz., 1 oz., or any other amount of syrup with each action of the pump. In the States milk or cream is kept either in the pumps or in special vessels surrounded by ice or ice water, or even in special cabinets. The two facts remain: cold milk is appreciated more, and prevents the trader losing money on sour milk, etc. Every night the pumps, vessels, etc., are cleaned out thoroughly and the milk replaced, attention being given to see that it always remains cold. Syrups with acid curdle milk, so be careful in mixing.

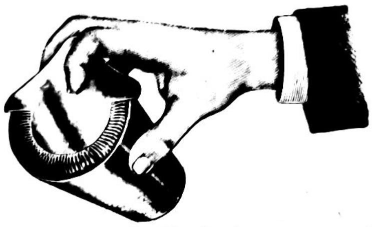
Old-Fashioned.—4 ozs. shaved ice, 1 oz. vanilla syrup, fill the glass with milk, shake thoroughly, strain into another glass. Sprinkle grated nutmeg on top.

Milk Chocolate Shake.—1 oz. chocolate syrup, glassful of shaved ice, milk. Shake well, do not strain, add whipped cream. Straws.



Strainer Shown Dropped into Shaker and Supported by Side Lugs.

Creme de Cocoa.—Less than ½ glass of shaved ice, 1½ ozs. chocolate syrup, 2 ozs. sweet cream, milk till nearly full. Shake and strain into another glass containing about 1 tablespoonful of whipped cream. Top with grated chocolate.



Strainer Grasped by the Hand, at once assumes Correct Position.

Coffee Milk Shake.—1½ ozs. coffee syrup, 1 tablespoonful powdered sugar, ½ glass shaved ice, milk to fill the glass. Shake, strain, and top with whipped cream.

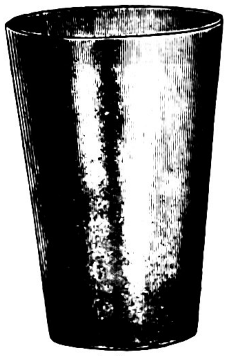
Philadelphia Coffee Shake.—½ glass shaved ice, ½ oz. sweet cream, 1 oz. coffee syrup, ½ oz. vanilla syrup, 3 ozs. milk. Shake, strain, fill the glass with milk.

Golfer's Delight.—½ glass of shaved ice, 4 ozs. cream, 1 oz. malted milk, ¾ oz. coffee syrup, 6 dashes grape juice. Shake, pour into glass repeatedly to cause a frothy heading.

Coffee Cabaret.—1 oz. coffee syrup, 7 ozs. milk. Shake well, add a measure of coffee ice cream and a spoonful of chopped walnuts.

Peach Milk Shake.—1 oz. peach syrup, ½ oz. grape juice, ½ oz. pineapple syrup, ½ glass shaved ice. Fill with milk, shake well, and serve with straws.

There are many variations of peach, pineapple, etc., shakes.



Shaker.

Persian.—½ glass shaved ice, 1 tablespoonful ice cream, 1 oz. milk, 1 dash vanilla extract, 1 teaspoonful each of crushed raspberry, strawberry and pineapple, 1½ ozs. catawba syrup. Shake well, fill with soda water. Spoon.

Japanese Milk Shake.—2 ozs. each of almond syrup, strawberry syrup and cream. Nearly fill glass with milk, shake, pour into glass and add little pistachio ice cream.

Sportman's Shake.—1 fresh egg, 1 dash raspberry syrup, 1 teaspoonful sugar. Fill with milk, shake, strain, and top with grated nutmeg.

Cocoa-Coffee.—1½ ozs. chocolate syrup, ½ oz. coffee syrup, 2 ozs. cream. Mix well and fill with soda water.

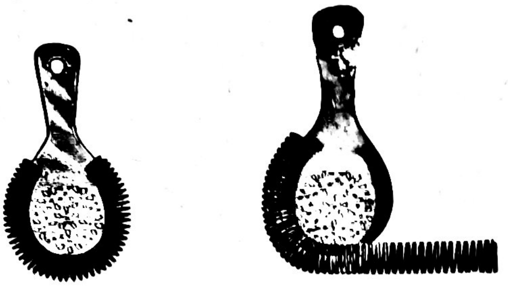
Fruit Chocolate Shake.—2 ozs. chocolate syrup, 3 ozs. sweet cream, ¼ glass cracked ice. Shake, strain, nearly fill with soda water, add ice cream and sliced pears and whole cherries.

The above are the simplest and least complicated recipes of the hundreds known.

Egg Milk Shake.—1 oz. of any flavoured syrup (the flavour will give the name to the drink), ¼ glassful of shaved ice, 1 egg, and the rest milk. Shake well.

Chocolate Egg Shake.—2 ozs. chocolate syrup, 1 ladleful cracked ice, 1 egg, and the rest milk, topping with powdered mace, cinnamon, or nutmeg.

Malted Milk Egg Chocolate.—1 oz. chocolate, ladle of cream, 2 ozs. malted milk, one small measure of ice cream, 1 beaten egg. Shake well, strain, add milk, and top with nutmeg.



Beverage Strainer.

Egg Coffee.—1 oz. coffee syrup, 1 oz. sweet cream, a little ice, and 1 egg. Shake well and add milk.

Egg Puff.—1 egg, 1 oz. orange syrup, 1 measure of ice cream, 2 ozs. milk. Shake, add soda water, and top with whipped cream.

Malted Milk Lemonade.—1 egg, the juice of 1 lemon, 1½ ozs. rock candy syrup, a suitable portion of shaved ice, 1½ teaspoonfuls of malted milk, and 1 measure of ice cream. Shake, pour into a glass, and add soda water.

White Velvet.—1 oz. pineapple syrup, ½ oz. orange syrup, ½ oz. punch syrup, the white of an egg, less than ½ glass of cracked ice. Shake, strain, and fill with milk.

Sizzler Shake.—2 ozs. sarsaparilla syrup, 1 drachm Angostura bitters, 1 egg, 2 ozs. shaved ice. Shake, and serve as other drinks.

The above are sufficient, no doubt.

Chapter XXI.—Hot Drinks.

Soda fountains should not be closed down in winter; apart from the fact that the boom in the ice cream and soda fountain trades means a bigger demand in summer, and less dropping off in winter, the artistic and attractive soda fountain is the ideal spot from which to serve the usual summer lines, and tea, coffee, chocolate, cordials, bouillons, clams, sandwiches, etc. The marble or other decorative scheme attracts, and is more hygienic than others.

There is no necessity to tell the trader that some of the drinks served cold in summer are as attractive and profitable served hot in winter. Egg or milk drinks go wonderfully well in winter, as do "hot sodas," *i.e.*, the usual summer drinks, but without ice cream, which is replaced with warm milk, etc. In fact, a poetical travesty should be allowed to be able to tell the trader: If you have brains, prepare to use them now. There are heaps of varieties to attract customers and their money.

We will start with cordials, which are very much akin to fountain syrups, with the possible qualification that if you wish to use glucose to thicken the syrups, you have more reason for doing so with winter cordials than with summer drinks, as they are preferred thicker and sweeter than the latter. Remember that different firms sell different "strengths," and that the directions on the bottle should never be neglected.

Raspberry Cordial.

1 gallon simple syrup,
1½ ozs. tartaric acid,
¾ oz. raspberry colouring,
2 ozs. soluble essence of raspberry.

Black Currant.

1 gallon simple syrup,
1½ ozs. tartaric acid,
¾ oz. raspberry colouring,
1½ ozs. soluble essence of black currant.

Lemon.

1 gallon simple syrup,
1¼ ozs. tartaric or citric acid,
½ to 1 oz. soluble essence of lemon.

Strawberry.

1 gallon simple syrup,
1 oz. tartaric acid,
½ oz. strawberry colouring,
½ to 1 oz. soluble essence of strawberry.

Peach.

1 gallon simple syrup,
1 oz. tartaric acid,
1 oz. liquid cochineal,
1 drachm concentrated essence of peach.
½ drachm essence of Noyeau (if desired).

Cherry.

1 gallon simple syrup,
¾ oz. tartaric acid,
½ oz. cherry (Murella) colouring.
1½ ozs. soluble essence of cherry.

Cloves.

1 gallon simple syrup,
1 oz. tartaric acid,
1 oz. caramel colouring,
1½ ozs. essence of cloves.

Pineapple.

1 gallon simple syrup,
1 oz. tartaric acid,
¼ oz. lemon or aurantine colouring,
Few drops of essence of pineapple.

This essence is always very strong, and care should be taken not to over-flavour the syrup. After every few drops whisk briskly and taste.

Peppermint.

1 gallon simple syrup,
3 ozs. essence of peppermint.
No acid or colour is required.

Gingerette.

1 gallon simple syrup,
1 oz. tartaric acid,
1 oz. caramel colouring,
1 oz. essence of gingerette,
½ drachm of essence of capsicine.

Sarsaparilla.

1 gallon simple syrup,
1 oz. tartaric acid,
2 ozs. caramel colouring,
1¼ ozs. essence of sarsaparilla.

Vanilla.

1 gallon simple syrup,
1 oz. caramel colouring,
½ oz. essence of Mexican vanilla.
No acid whatever is required.

On no account should French cream be added to cordials.

Preservative is hardly necessary, as the cold weather is not likely to spoil these syrups, and the trader will surely make the quantities repeatedly, and not be overstocked with them.

Of the above flavoured syrups or cordials, 1 to 1½ ozs. to a medium size glass of hot water will make a really fine winter drink. Advertise them as hot fruit drinks. See that the water is hot, and that the glasses are clean.

Other flavours can be made in practically the same proportions, but remember to read the directions on the essence bottles carefully, as some essences require less acid, more colour, and so on.

TEA, COFFEE, COCOA, CHOCOLATE, Etc.

These well-known British drinks are as profitable as any sold at a fountain, and should be well advertised. At all "luncheonettes" (*i.e.*, additional catering connected with soda fountains) these drinks are run all the year round, and do a lot to make the winter running of the bar a success. Care with the ingredients, how they are purchased, stored, prepared and served, etc., are three-fourths of the success or loss. Everything, from the making to the serving, from the selection of the best providers to the details of cups, saucers, biscuits, menus, etc., should be the one care of the successful trader. His one aim should be to get the name of serving the best in the district.

Tea should be of the best quality, not too pungent or "gunpowdery," and stored in hermetically-sealed tins, so that the flavour does not evaporate, and that other smells or flavours do not mingle with it. The water should be fresh, *i.e.*, not standing at boiling point, and should not have been previously boiled. A perfect cup of tea can only be made with water that retains its lime, and this means fresh water from the tap, allowed to reach boiling point (when it bubbles), and poured there and then on the tea leaves. One teaspoonful is sufficient for one cup, and it is best to rinse the pot with hot water immediately before placing the tea leaves in it, so that the boiling water does not lower in temperature too quickly, and so fail to extract the flavour from the leaves. After five minutes the water starts extracting a poison called tannin from the leaves, and this is detrimental to the human system, causing constipation, imperfect vision, and assisting such illnesses as rheumatism, etc., to grip the system. Apart from the hygienic point of view, stale tea has not the flavour that fresh tea has, so the trader has two reasons for making his tea fresh, and this means not letting the leaves stand in the water for more than five minutes. The tea can easily be strained into another pot or cup and kept hot. When large quantities are made, such as at parties, bazaars, etc., it is customary to place the leaves loosely in a large, clean muslin bag, tying this with strings to the urn. After the bag has been in the tea for five minutes, stirring occasionally so that the flavour is extracted from the whole of the contents of the bag, this is withdrawn. If the container or compartment of the urn is of earthenware, and is surrounded with hot water, this tea will be in good condition for hours.

For a pot of tea for two persons or cups, rinse the pot in hot water, so that all the chill is removed, measure two teaspoonfuls of tea leaves, and pour into the pot and nearly fill the pot (if large, not more than ¾ pint) with fresh boiling water. Replace the lid on the pot, place this on the tray with the sugar bowl, milk or cream jug, slop basin, strainer, cups, saucers, spoons, etc., and place before the customer or customers, who will serve themselves.

A single cup is served by the assistant and placed before the customer already prepared. First the milk is poured in the cup, then the fresh tea (from pot or urn) is poured in to within ½ inch from the rim. The customer will sweeten it himself. China tea is more hygienic than Indian tea; it never brews strongly.

Instead of milk and sugar, some prefer, especially in summer or to cure a headache, a slice of lemon. The hot tea extracts the juice, becomes well flavoured and is a good medicine for stomach and nerves.

Coffee is very rarely prepared and served properly in Britain. Apart from the ever-increasing use of coffee and chicory extracts, even those who use fresh coffee rarely use it to the best advantage. Like tea, it should be made freshly, with fresh boiling water, so that the caffeine (similar poison to tannin) is not extracted and passed on to the customer. Once you get the reputation of making a good cup of coffee, you may rest assured that your shop will never lack customers. With a fragrance all its own, good coffee will be searched for all over a district, and it pays to serve it.

There are various methods: The best known on the Continent, where, if anything, more attention is given to flavours and niceties, is the simple boiling. The tall coffee pot is rinsed out, nearly filled with fresh water, according to the number of cups required, and placed on the fire. As soon as it reaches boiling point one tablespoonful of fresh coffee for each person is poured into the pot and stirred. As it rises and appears to be about to overflow, the pot is lifted from the fire, so that all settles down again, and then it is replaced on the fire. Others cool it by stirring with the spoon. After being allowed to re-boil for not more than three times, the pot is allowed to rest, so that the coffee grounds settle down. A little cold water is often used to expedite this settling.

The coffee is then poured into the cups, each person satisfying himself with sugar, milk or cream.

Italian restaurants in London and elsewhere obtained huge sales of café-au-lait by giving their clients the flavour that is never obtained by adding milk to the water, and boiling this with the coffee. Instead, hot milk is poured simultaneously into the cups with the hot coffee. In Britain coffee and milk sells better than black or plain coffee, although the latter remains the after-dinner or artistic drink.

Another well-known method is the percolation, which consists of pouring the boiling water through the coffee, either dry or previously moistened with cold water. The water has to pass through the coffee more than once to get the flavour and strength out of it.

The coffee beans should be of good quality, preferably Mocha and Java in equal quantities, with an addition of not more than 10 per cent. of chicory, to give colour and the flavour, and ground fresh daily, if possible. Store in tight tins, so that the flavour does not evaporate. Coffee extracts, syrups, etc., are not to be compared with the real article.

Cocoa is the most nourishing of these drinks, its Latin name (theobroma, the food of the gods) being less of an exaggeration than some think. It is best purchased in powder form from one of the well-known firms of high repute. One teaspoonful of this powder is mixed with one or two teaspoonfuls of granulated sugar, and boiling water is poured on to it, stirring briskly. A little milk or cream, or marshmallow, and you have a perfect drink.

It is becoming more general in the trade to boil the cocoa, thus giving it a better flavour. Some boil it with a good proportion of milk instead of all water. It is best not to let it stand boiling for hours, as a loss in bulk must surely follow.

Another method is to have a hot or cold paste ready, and serve one ounce of this to each cup. Here is a good recipe; 4 ozs. best cocoa, 2½ lbs. sugar, 2½ pints water, and ½ oz. corn starch. Boil well together. One ounce of this is enough for each cup of hot water. It is usual to top with cream, whipped cream or marshmallow.

Another recipe is: 1 qt. water, 1½ lbs. sugar, and ½ lb. best cocoa. Boil for one hour. Remove from fire, and add 1½ pints unsweetened condensed milk. Serve as above.

Flavours are hardly required in cocoa, although some claim to attract customers a great deal by adding the mere trace of vanilla, salt, cinnamon, grated coconut, etc. Here, again, a natural drink, with enough flavour of its own, is being spoilt by the American method of adding this and that to it under the cloak of competition, variety, etc.

Chocolate is, without doubt, *the* selling line of fountain hot drinks. It has already reached the stage of being served in glasses instead of cups, and dispensers boast of their chocolate as of something entirely different from anyone else's.

There are recipes galore for this drink, and readers will thank me for not forcing too many on to them, as they are all much of a sameness. From the simple recipe calling for one heaped teaspoonful of good chocolate powder to a cup of boiling water, or watered milk, topped with whipped cream and served with dry biscuits or wafers, to the elaborate collection of ingredients for an urnful of hot chocolate, the only difference is the seasoning or addition of a little this and that, which, after all is said and done, is not absolutely necessary. The following is as good as any:—

Boil 5 qts. water, 5 qts. milk, 2½ lbs. sugar, and 1 lb. good cocoa, and keep hot in the compartment urn. This recipe is made dearer and more luscious by using all milk instead of water, and dearer still by using cream to a good proportion.

We may criticise recipes as much as we will, but it is our duty to get that flavour that attracts customers, especially when they are tired of the usual or orthodox taste of drinks. If many ices, why not many chocolates?

Chapter XXII.—Bouillons, Clams, etc.

The soda fountain trade has spread its wings as every other, and customers now go to a fountain not only for an ice cream drink or a sundae, but also for hot drinks of many varieties—soups, bouillons, etc. And it pays the trader to decide quickly whether he will have no call for these, or whether it pays him to install one or two extra utensils necessary to supply customers with nice hot drinks.

You probably have a plain urn, containing only hot water. Better still to have a compartment urn, with facilities for keeping milk, coffee and chocolate always nice and hot. A further step in the right direction, and you have a warmer or steam table for keeping tomato, beef and other drinks ready. Cleanliness does a lot. If you are already running a café or restaurant, you may easily transfer part of the business to the luncheonette service attached to the fountain, and run those natty little lunches that appeal so much to the public.

For instance, ham sandwich, a fruit pie and coffee or chocolate; tomato bouillon, sandwiches and coffee; beef sandwiches, mashed potatoes, fruit pie and tomato bouillon, and so on. Salads are the great sellers in summer.

For the uninitiated, let it be said that a bouillon is a clear soup served in a mug, or a special bouillon cup, broad and squatty, with two handles and an appropriate saucer. As a rule, a spoon and a couple of dry biscuits are served with each bouillon. It is essential that these beverages be served hot, and not luke-warm, just as a glass of soda is served cold, and not warm. And make sure that everything in the kitchen or at the luncheonette runs smoothly: the best of attention to every detail, cleanliness above everything, a place for everything and everything in its place, and nothing haphazard, be it the purchase of ingredients or the use of the right utensils.

The best selling bouillons are those made from beef, tomato, clams, chicken, oysters, etc., either plain or mixed with other broths. Here, as in other departments of the fountain trade, the trader must use his own judgment as to what his clients are likely to prefer, and must certainly keep abreast of the times by keeping an eye on what the other establishments are catering for in his town and in the trade.

Beef Bouillon.—Either one teaspoonful of beef extract to a cup of hot water (and a little salt and pepper, if the customers so desire), or else make your own with own purchases, such as 2 lbs. beef, ¾ lb. marrow-bone, 1¼ pints water, ½ tablespoonful of salt, pinch of peppercorns, one tablespoonful each of sliced carrots, sliced turnips, sliced celery and sliced onions. The meat is cut into dice, one-third is browned in marrow fat, the rest soaked in water for 30 minutes. Then allow the whole to boil, and then to simmer for 5 hours. Add the seasoning, and cook for 1½ hours; then strain, cool, remove fat, and clear thoroughly. This is a very good hot beverage.

Tomato Bouillon.—From one teaspoonful to a tablespoonful of tomato bouillon (there are many makes on the market containing the seasoning as well) to a cup of hot water, or make your own from the following ingredients: 1 can tomatoes, 1 qt. milk, 2 tablespoonfuls minced onion, 3 of flour, 1 of sugar, 2 teaspoonfuls of salt, 1 of chopped parsley, 5 cloves, ½ teaspoonful soda, celery, salt and cayenne pepper to taste, and 2 tablespoonfuls of butter. The butter and onions are fried for about 5 minutes, then the flour, the seasoning and the milk are added and cooked just under boiling point. Cook the tomatoes, pass through a sieve, and add the soda previously dissolved in a little boiling water. Mix all thoroughly, and serve as it should be served—*i.e*, very hot, and never weak or watery.

Beef and Tomato.—One teaspoonful of beef bouillon and another of tomato bouillon, with seasoning. Fill with hot water.

Cream Boviline.—One teaspoonful of beef bouillon, ½ oz. sweet cream, hot water and seasoning.

Lactated Beef.—One teaspoonful of beef bouillon, seasoning, and fill with one-fourth hot milk and three-fourths hot water.

Beef and Egg.—One egg, plenty of beef extract, salt and pepper; shake thoroughly, and strain into a large glass, filling with hot water and stirring quickly, so that the egg does not " cook " or curdle.

Astor Nog.—One egg, beef as above, ½ oz. sweet cream, pepper, salt; shake well, strain into a large glass and fill.

Delmonico Nog.—Same as above, but with the addition of mixed spices.

Peptonized Beef Tea.—Dissolve well five grains of pepsin in a little boiling water by stirring well; then add ½ oz. beef, pepper and salt, and fill with hot water.

Oyster Bouillon.—1 or 1½ ozs. of oyster broth, and fill with hot water. Season to taste.

Oyster Broth.—Chop finely one dozen oysters, add 24 ozs. of the juice they come in; mix well, add water if the mass dries up, and cook thoroughly, then pass through a sieve; 1 oz. of this, with one tablespoonful of cream and a little butter, besides the seasoning, will make a fine oyster drink.

Oyster Treat.—1 oz. oyster juice, a little hot milk, a pinch of celery salt and seasoning (mixed spices, if possible), hot water and top with whipped cream.

Oyster Snap.—Oyster broth, red pepper, and hot water. Sells well in cold weather.

Oyster Bovine.—Equal quantities of oyster juice, beef and tomato, seasoning, mixed spices and hot water.

The above recipes are sufficient for the trader from which to make up others.

Clam Bouillon.—1 oz. clam juice, ½ oz. sweet cream, seasoning and hot water.

Clam Broth.—Same as above, but with a topping of butter.

Clam Cocktail.—2 ozs. clam juice, juice of half a lemon, seasoning and hot water.

Clam and Milk.—As above, but served with all milk, or half milk and water.

Clam and Tomato.—1 oz. clam juice, ½ oz. tomato bouillon. Season and hot water.

Chicken Bouillons, Broths, etc., are made from chicken extracts, etc., and traders can keep abreast of the times by referring periodically to the wholesale supply houses and to their announcements of novelties in trade papers.

THE LUNCHEONETTE.

My work must now come to a close, and the luncheonette must be left in the hands of the fountain owner. If he has run a café or restaurant he will have the experience—or the staff—to keep this adjunct to the fountain as up-to-date as possible, with sandwiches of all descriptions, salads, fish spreads, mayonnaises, cakes, rarebits, soufflés, pastries, pies, puddings, jellies, custards, sauces, scallops, potted meats, and the other odds and ends that encircle customers and grip them at a fountain for either one thing or another. Scrupulous cleanliness, fine lay out, freshness of all ingredients, and proper attention to storage, the best possible service to each customer, individually as well as collectively, and success is assured.

Traders may read articles from morning to night, and far into the night, they can discuss trade matters with everyone they meet, they can be grateful or ungrateful to editors, writers of articles, and so on; but the best foundation of success is always attention to business in all its details.

THE
DISPENSER'S FORMULARY
OR
SODA WATER GUIDE

A PRACTICAL HANDBOOK FOR SODA FOUNTAIN OPERATORS CONSISTING OF OVER 2,000 TESTED FORMULAS FOR SODA FOUNTAIN PRODUCTS, WITH COMPLETE INFORMATION ON FOUNTAIN SERVICE, FOUNTAIN STANDARDS, ICE CREAM STANDARDS AND FORMULAS, AND LUNCHEONETTE SERVICE, INCLUDING AN

APPENDIX

OF MANUFACTURERS' FORMULAS, TOGETHER WITH DESCRIPTIVE INFORMATION OF THEIR FOUNTAIN APPARATUS, SUNDRIES AND SUPPLIES

COMPILED BY THE EDITORIAL STAFF OF
THE SODA FOUNTAIN

THIRD EDITION, REVISED AND ENLARGED

(*Index on Page 177*)

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INTRODUCTION

The thanks of the compilers of this new edition are due the many contributors who have assisted in making it a larger and a better book.

All of the new formulas have been originated by practical dispensers and have stood the test of actual sales at the fountain. The classification of soda fountain drinks and delicacies in the following pages is based upon the work of the members of the Dispenser's Testing Club in The Soda Fountain. The definitions and standards of purity for soda fountain supplies and materials have been based upon the official standards of the state and national pure food experts. Finally, all formulas have been scrutinized and criticised by men of practical experience in the making and dispensing of soda fountain products.

To all of these practical men—druggists and confectioners, dispensers and luncheonette chefs, pure food chemists and officials—our thanks are due. We appreciate their valued assistance and have tried to give "honor where honor is due," by acknowledging to each his individual contributions. Their names will be found in the Index.

In the preparation of this new edition the compilers have held before them the triple ideal of Simplicity, Completeness, and Practicability.

That the book might be more simple and usable all formulas have been gathered together into *groups*, based upon the Official Fountain Nomenclature as prepared by The Soda Fountain and perfected by the members of the Dispenser's Testing Club. For years dispensers have known that the fountain business has been injured by the distressing lack of uniformity in the naming of drinks and specialties. At any bar from New York to San Francisco a Bronx cocktail is a Bronx cocktail, but a banana split in Duluth may be a very different thing from a banana split in Dallas. What the bar tender has done, surely the soda dispenser can do, and if dispensers will follow the classification they have themselves drawn up great progress can be made. It is not wise that all originality should be squeezed out by any rigid rule o' thumb, but in such basic names as "shake," "ade," "split," "bitters," etc. uniformity is much to be desired.

The completeness of this new edition is best attested by its Table of Contents. Although based upon the last edition, it is essentially a new book. All the thirteen hundred formulas in the last edition were carefully considered, some were slightly changed and many were discarded as being practically duplicates or out of date. To these were added the famous Prize Formulas that have been contributed to The Soda Fountain during the past five years, and many special formulas from dispensers who were interested in this new edition of their favorite "Soda Water Guide."

The departments on Fountain Service and Ice Creams and Water Ices are entirely new and have been specially written for this book. The Ice Cream Department is one of which we are particularly proud. The new Luncheonette Department is the first collection for dispensers and chefs of formulas and recipes specially designed for use in this new and promising department of the modern soda fountain. It will be a welcome addition to the hundreds of dispensers who have taken up this interesting and profitable adjunct to fountain service.

Every effort has been made to make this book thoroughly practical. The arrangement of formulas into groups, and, so far as is possible, the collection of formulas calling for the same flavors together within the groups, makes for ease in quickly and easily finding what a user wants. The pricing of most fancy specialties has been carefully done by an expert and conforms with the present high cost of materials. This feature cannot but be of great value. The advantages of having manufacturer's special formulas for their own specialties, and a catalog of fountain apparatus, sundries, and supplies was quickly appreciated by the compilers and the Appendix is the result. The complete Index, where every formula is listed by class and name, makes the great mass of matter in the book available for instant use.

This new edition of the Dispenser's Formulary is the most complete guide and formula book published for the soda fountain trade. We believe that it is also the best arranged and the most practical. It is our hope that it will be of real service to those young men who are devoting their lives to this great and truly American industry. The future of this industry was never brighter. Sodas and sundaes are as much a part of our American life as telephones and newspapers. The widening spread of the temperance movement and the year-round stability to trade that is a part of the luncheonette department, are both factors that will count for the soda fountain's great growth and prosperity during the years before us. Service and sanitation, special features and wise publicity are the points upon which success depends. If this book shall help dispensers to make more of their opportunities and shall do its part towards bringing about standardization of fountain classification, it will have accomplished the purpose for which we who have compiled it have labored.

The Editors.

FOUNTAIN SERVICE

Success in the soda fountain business depends upon three things—perfect sanitation, good service, and effective publicity. These three form a triangle, as it were, and no fountain has ever risen high that has not built firmly upon this solid three-cornered foundation.

The sanitation text has been preached all over the country till it has become the fountain gospel. The clean fountain—not only with spotless apparatus and shining appurtenances, but also with syrups, crushed fruits, and creams made only from pure, fresh ingredients in clean utensils and properly kept—is the fountain that attracts trade. The clean fountain must have good service to hold the trade it attracts. Good service includes quick service and attractive service. Americans are proverbially in a hurry and the appeal to the palate must be supplemented by the appeal to the eye. With sanitation and service, the fountain owner or manager has the best arguments furnished ready-made for his publicity work. If he does not use these arguments to the best advantage he fails to make the most of his opportunities, and a consistent advertising campaign should always be counted a part of the regular fountain business.

It will well repay every dispenser to post himself thoroughly upon sanitation, service, and publicity, but before we take them up in detail it is well to consider briefly the fountain equipment. It would be out of place in this book of fountain formulas to go into exhaustive detail in this matter of apparatus, but many a good soda stand is handicapped by being improperly equipped for the business it handles. Some owners are "fountain poor"—that is, they have an excessive investment in their apparatus. Others are struggling along, striving to meet competition and to give good service with an inadequate or antiquated equipment. No operator so equipped will get the profits that he should from his business.

How Much Should the Soda Fountain Cost?

It is not alone the merchant who has never conducted a soda business who sometimes needs instruction in purchasing a soda fountain. The man who has just awakened to the fact that the old "dog house" fount is a thing of long ago, is in a far worse fix. The modern merchant enters the field unencumbered by moss-covered ideas. The "Rip Van Winkles" are tied down to old traditions, and are with difficulty awakened to the equipment needs of the day. Then, too, there is the soda man who because of his isolation in some small town is really unable to estimate what his business should have in the way of equipment. It is impossible for him to get away long enough to look about and see what others are doing.

The size and capacity of the soda fountain outfit should depend on location,—not necessarily location in the sense that the prospective purchaser is on the best corner in town, but—how much business does the purchaser command? He may be the only fountain man in a town of 500 population, but this town may be the county seat and the Mecca for 1500 people from the surrounding countryside.

In every town, not necessarily in the "backwoods," there are soda men who are not awake to the fact that the day of the soda bottle proposition and the tank and charging outfit are things of the past. There are few towns today where the fountain man cannot obtain water or electrical power, to operate automatically the modern carbonator. Yet it is surprising the number of soda men who do not consider the carbonator a necessity. This apparatus is established in the soda business, and the ancient rite of charging the soda water by the old "rock the cradle" method, is behind this day and age. The carbonator reduces the cost of soda water by at least one-third and eliminates much drudgery.

OUTFITS FOR TOWNS OF 500 POPULATION AND UPWARDS

Estimate No. 1—One six-foot counter with marble top, equipped with one double stream draught arm; one ice cream cabinet; six to eight syrup bottles; four-foot sink, one steel tank, one charging outfit, one dozen holders, one dozen ice cream spoons, three dozen soda glasses, one shaker, one strainer, two fruit bowls, one phosphate dasher, one straw jar, one spoon jar, one lemon squeezer. This outfit can be purchased complete and first class on easy terms for approximately $180 to $200.

Estimate No. 2—One eight-foot, eight syrup pump fountain, with four crushed fruits in the fountain (bowls are passe'), two ice cream compartments, a refrigerator also in the fountain; two steel tanks and one charging outfit, if a carbonator is impossible (a carbonator should by all means be had if power is available), one draught arm for city water, two doublestream draught arms for soda, one dozen holders, one dozen ice cream spoons, one shaker, one strainer, three fruit bowls, two phosphate dashers, one straw jar, one spoon jar, one lemon squeezer, one dozen sundae spoons, two dozen sundae glasses, two ice cream dishers, one 16-to-the-quart for sodas, the other, 8-to-the-quart for sundaes. This complete outfit ready to run can be purchased on easy terms for, approximately, $575 to $700.

OUTFITS FOR CITIES OF 500 to 2,500 POPULATION

Estimate No. 3—One eight to twelve-foot, 12-syrup pump fountain; four crushed fruits in fount, also two ice cream compartments, one refrigerator and chipped ice container similarly located; one rinse tank and the very essential tumbler asher, carbonator, one dozen soda holders, one dozen ice cream spoons, two hosphate dashers, one straw jar, one spoon jar, one lemon squeezer, one lemon nife, one cork puller, one dozen sundae spoons, two dozen sundae glasses. This utfit can be purchased on easy terms for, approximately, $750 to $1,100.

Estimate No. 4—One 10 to 12-foot, twelve syrup pump fountain, four crushed ruits, two ice cream compartments, one refrigerator in apparatus, with chipped ce container, one sink, one tumbler washer, carbonator, sufficient drain board o make a very desirable apparatus, two soda draught arms and one arm for ity water, one and one-half dozen holders, four dozen glasses, one shaker, ne strainer, two phosphate dashers, one sugar jar, one straw jar, one spoon older, two dozen ice cream spoons, one lemon squeezer, one cork puller, one emon knife, three dozen sundae glasses, two dozen sundae spoons. Price $800 o $1,200, which is, of course, for a modern fountain counter service equipment.

OUTFITS FOR CITIES OF 2,500 TO 10,000 POPULATION

Estimate No. 5—One 12 to 14-foot, 12 syrup pump fountain, four crushed fruits, two ice cream cabinets, cold closet, two rinse tanks, two tumbler rinsers, carbonator, sundries as in No. 4, marble counter with back bar 12 feet long, oak or mahogany finish, with closet base, marble top slab, superstructure of modest design, with French plate mirror. Price, $1,200 to $1,750.

Estimate No. 6—A double fountain, 16 to 20-foot in length, either marble or ll onyx counter, with 16 syrup pumps, four crushed fruits, six draught arms, ne for soda water, one city water and another for mineral water at each station; hree ice cream cabinets, one milk compartment, with milk pump; two refrigerators, two chipped ice containers, one at each station; two rinse tanks, wo tumbler washers and two disher vats, one for each station, balance of the outfit filled in with German silver corrugated drainboard; carbonator, accessories as in Estimate No. 4 should be doubled. This fountain outfit includes a back bar, oak or mahogany finish, closet base, with marble or onyx top slab and superstructure of handsome design, with or without closets, and large mirror in center. An outfit of this character would meet all demands and is capable of doing a large volume of business, particularly so if it is a direct icing or combination, and not an iceless fountain. Price, $1,800 to $3,000.

Soda Fountain Tools

Having the proper outfit to do the business that there is in his own field, the fountain owner should see that he is provided with the means of keeping his equipment in good running order. "A stitch in time saves nine" and a tightened bolt today will often mean the saving of a big repair bill next month. Therefore every store should have a set of tools in good condition and invariably to be found *in their places* and not where the last user dropped them. It does not pay to buy a ten-cent hammer or a seven-cent brush. The head will come off the hammer and the hairs out of the brush. A fair price for a good article is cheaper by far than a low price for a patently inferior article.

The soda-fountain tool chest should contain a long, hardwood handled, nickel-plated, tempered ice pick. A couple of these will not come amiss.

Then a needle-pointed ice chipper will prove a valuable implement to have on hand. First, it will chip up a tub of ice quickly and satisfactorily. Second, it is a fine thing to break up caked sugar or salt with, and last, but not least, it is so made that a punch bowl may be cut out of a cake of solid ice in a few moments.

The sliding ice pick of iron permits an especial leverage to be brought on any given point, while the one made with adjustable points is intended to crack ice to any size or shape without noise. The ice chisel of polished steel is first cousin to the long-handled ice shaver, and many soda fountains cut all their ice with these two implements without finding it unduly laborious.

Ice shredders are invaluable to obtain shredded ice quickly for serving iced tea, oysters, clams, olives, radishes, celery or tomatoes.

Among the other tools should be found a good lime and a lemon squeezer. A couple of serviceable corkscrews will never come amiss. A wire strainer, also one for an oval bowl, a scraper for ice-cream disher, and ice-cream dishers of different sizes, transfer ladles and ice scoops all will find frequent use. In addition to these, a compartment containing several finely tempered saws, a plane, a good hammer, wrenches, pliers, a bit-brace, a soldering outfit, some brushes and white lead will more than pay their original cost in the saving perhaps of a single plumber's bill.

No wide awake dispenser fails to appreciate the value of a "sanitary fountain". The press, the public, the medical profession, the boards of health, state and federal inspectors, self-appointed investigators, women's organizations, THE SODA FOUNTAIN, and veterans in the business are constantly telling the story of the clean soda fountain. No further argument is needed to convince any one of the advantages of the most perfect sanitation at the fountain and in the syrup room, but notwithstanding the volume of this admonition, there is often a woeful lack of definite advice and specific instructions on how this desirable state of cleanliness can be accomplished. In this connection the Bulletin of the Illinois State Food Commission on "Ice Cream Soda and Soft Drinks" is of peculiarly practical value. It goes into the matter of fountain sanitation in a thorough and business-like way, and bears the stamp of authority from that State's pure food expert, Commissioner W. Scott Matthews:

Decomposition

The materials, such as syrups, crushed fruits, cream, ice cream, etc., from which soft drinks, sodas and sundaes are made, are subject to rapid deterioration. They readily spoil and thereby become unfit for food unless proper methods of preservation are used.

To intelligently handle these materials requires a knowledge of the causes of spoilage.

Decomposition or spoilage is, in most cases, due to some of three causes, molds, yeasts or bacteria.

Molds develop on substances containing sugars, starches or fruit acids. They injuriously affect the quality, flavor and food value of the substances which they attack and generally impart thereto a musty taste and odor. Moisture is necessary for their development.

Yeasts decompose the sugars present in fruit juices, syrups, etc., produce alcohol and give off a carbonic acid gas. Syrups which have been attacked by yeasts have a frothy appearance due to the rising of small bubbles of carbonic acid gas; they generally have a sour odor and are said to be fermenting

Bacteria attack the nitrogenous materials at the fountain such as nuts, milk and cream, and ice cream. They are the cause of putrefaction.

Most of the diseases of man are caused by bacteria. These bacteria multiply at an enormous rate during the progress of the disease. The disease producing bacteria are carried to other persons by means of their food and drink.

Molds, yeasts and bacteria are everywhere present: in the air, in water and on foodstuffs. They are generally present in an inactive ("seed" known as spore) condition.

These spores (germ seeds) develop only where they find suitable conditions.

In general, the conditions under which yeasts, molds and bacteria grow most readily (and consequently spoilage takes place most rapidly) are presence of moisture (water), a warm temperature and absence of sunlight.

While the spores of molds, yeasts and bacteria are everywhere present about the fountain, the numbers in which they are present are in proportion to the amount of dust and dirt present.

Clean fountains are comparatively free from molds and bacteria. Dirty fountains harbor large numbers.

From the standpoint of healthfulness, the kind of bacteria is of greater importance than the number.

Many bacteria are harmless to man when taken into his system. Others are the causes of tuberculosis, typhoid fever, diphtheria, Summer complaint and other diseases. Harmful bacteria are carried to the fountain in the milk, cream and ice cream supply from diseased employees; in the glasses and spoons used by diseased patrons; or are carried from filthy places by flies, cockroaches, rats, mice, dogs or cats.

Fountain and Equipment

The fountain should be attractive but of simple construction. Many fountains are now on the market which permit of rapid and thorough cleaning. The old so-called "tombstones" are insanitary.

The floor behind the counter should be of cement, tile or other non-absorbent material. The floor should drain to a catch-basin in the center.

Purchase plain glass and silverware. Dirt is easily removed from them. Decorated silver and rough glass surfaces are seldom clean. Much labor may be saved by purchasing only plain, smooth accessories.

Protect straws from dust, dirt and flies. Do not unnecessarily handle them.

The practice of placing straws in jars where children may play with them is decidedly insanitary. Frequently older persons are seen unconsciously playing with the straws so exposed.

There are many sanitary straw containers on the market which dispense but one straw at a time. By the use of these inexpensive machines the customer is sure of having a clean straw to place in his mouth.

Never expose straws on the tables or counter where they may become filthy as a result of being handled.

Table tops and counters should be constructed of some material impervious to water. The varnish on wooden tables and counters soon becomes destroyed by the water used in keeping them clean. Where wooden tables are used the table may be kept in fairly good condition by a daily application of a mixture of one pint of benzine and one pint of paraffin oil.

Daily Cleaning

The fountain should never be permitted to remain in a dirty condition during the night. The accumulation of refuse and slops is heavily loaded with molds, yeasts and bacteria. During the warm weather they grow very rapidly and many give off foul odors. These odors developing near the fountain contaminate the soda materials and spoil their flavors. Harmful disease-producing bacteria also greatly increase in number if permitted to grow during the night. In a few hours a few bacteria may become many thousands.

At the close of the day's business all glasses, spoons, drain boards, sinks, tables and counters should be carefully washed; the garbage pail removed and emptied; and the floor behind the counter scrubbed with hot water and washing powder.

Do not have anything behind or under the counter beneath which dirt and slops can accumulate. The drain-boards, cooler-boxes, cabinets, etc., should be so constructed as to have the floor beneath them accessible for scrubbing.

The foul odors noticed at many fountains are caused by the decomposition of the material carelessly permitted to remain under these furnishings.

A filthy floor under the counter is inexcusable.

The room should be well ventilated during the night.

All glasses, spoons, jars, etc., and all drain-boards, sinks, tables and counters shall at all times be kept in a clean and sanitary condition.

Washing Glasses

The washing of glasses and spoons should be given more care and attention than any other operation at the fountain; it is often given the least.

The general public is awakening to the dangers of patronizing soda fountains where glasses and spoons are improperly washed.

The following letter which was recently printed in a Chicago paper serves to illustrate how a soda fountain may lose customers:

"Not very long ago I entered an ice-cream parlor and as I was seated near the marble counter where the utensils used for serving are cleaned I saw things which opened my eyes.

"First, the filthy, sloppy state of the whole place back of the counter and the insanitary ways of handling the utensils, mainly the spoons and glasses. All the glasses and spoons which were used by the customers were hastily put in a tank of cold, dirty water, rinsed in it and quickly set out again for the next customers.

"We all know that dirty cold water does not clean or remove germs from anything. We all know, too, that there are many people who might have infections diseases of the mouth, also many children who are not very clean, and it is against this great danger of disease germs that proper cleaning of utensils should be required.

"After seeing what went on back of the counter I lost my taste for the ice cream which I had ordered and left it untasted."

That the objections of the writer of the above article are well founded may be seen from the following statistics:

According to data gathered by the United States Public Health and Marine Hospital Service, "In the United States 160,000 human lives were prematurely ended by tuberculosis (consumption) during the year 1908." This enormous number does not include the deaths hastened by tuberculosis but charged to other immediate causes. "Every one of these deaths was due to infectious material (germs) that had their origin within and was expelled from the bodies of tuberculous persons and animals."

Persons affected with tuberculosis of the lungs, throat, etc., expel the germs in the fluids from their mouths. These germs are left on the soda glasses and spoons used by these persons, and unless the glasses and spoons are thoroughly washed these germs are present in the glass of soda served to the next patron.

The germs that cause tuberculosis are not the only disease germs to be found on dirty glasses and spoons. The germs that cause diphtheria, pneumonia, catarrh, etc., are left by persons with these diseases.

Soda glasses and spoons are not easily cleaned. **Simply rinsing them in water does not clean them.**

All glasses, spoons, etc., must be properly cleaned.

One of the easiest methods of cleaning glasses is: First remove the material left in the glass by the patron by a thorough rinsing of water; then wash the glass both inside and outside with a glass-brush, using water containing 12 ounces of bicarbonate of soda or washing soda to each gallon of water (this solution should be warm); after thoroughly washing the glasses in the soda solution, rinse thoroughly in running water. Place on a clean metal drain-board to dry.

Spoons should be similarly washed.

The use of dirty or half-washed glasses is prohibited.

Rush is no excuse for using dirty glasses. Have a supply of glasses sufficient to use during the rush periods.

If you wish to polish glasses use a towel. Never blow your breath on a glass.

Many sanitary vessels for serving ice cream and soft drinks have recently come on the market. From a sanitary standpoint these single-service containers possess many advantages. Their use is becoming more general.

To Dispensers

Before starting the day's business everything about the fountain should be absolutely clean. If flies are present, use the swatter. Flies carry disease germs; their presence drives away your good customers.

See that you have sufficient crushed ice to meet your needs. Ice used in iced drinks should be thoroughly washed before crushing it. See that the fountain container for the crushed ice is absolutely clean, as well as the scoop used for handling it. Never handle crushed ice in your hands.

When serving soda your hands should be dry. Have plenty of clean towels. Never permit water to drip from the hands into the glass of soda being drawn.

Personal cleanliness is essential to your success at the fountain.

Never appear behind the counter except in a clean, white coat.

Notice to Employees

Concerning the Provisions of the Illinois Sanitary Food Law.

1. The floors, walls and ceilings of every room, building or establishment occupied or used for the preparation, manufacture, packing, storage, sale or distribution of food, must at all times be kept in a clean and sanitary condition.
2. All utensils, implements, machinery and equipment used in moving, handling, cutting, chopping, mixing, canning and preparing food must be thoroughly cleaned daily.
3. All food in the process of manufacture, packing, storage, sale or distribution must be securely protected from flies, dust and dirt.
4. All refuse and dirt, and all waste products subject to decomposition and fermentation, must be removed daily.
5. The clothing of all operatives, employees and clerks, who handle or come in contact with the food, must be clean at all times.
6. Toilets and washrooms shall be supplied with soap, running water and towels, and shall be cleaned daily.
7. All employees who handle food or the materials from which it is prepared, shall wash their hands thoroughly in clean water before beginning work and after visiting the toilet.
8. Cuspidors shall be emptied and washed out daily, and when in use shall contain at least five ounces of water or disinfectant solution.
9. Employees shall not spit on the food or raw materials, nor on the utensils, floors or walls.
10. No person who is affected with any contagious or venereal disease, is allowed to work in any such establishment, nor is any person allowed to sleep therein.

Whoever violates or fails to observe any of the above provisions, is guilty of a misdemeanor, and may be punished by fine or imprisonment, or both, in the discretion of the court.

How a New York Fount is Cleaned

Here is the way a successful New York City soda fountain is cleaned:

Every morning the syrup containers, pumps and detachable accessories are washed in hot water, and the syrups jars are dried with a clean towel. Glasses are washed in hot water, dried with a clean towel and polished. (When the rush becomes too great to go through this procedure, the dirty glasses are sent down cellar on the dumb waiter and are brought up and washed and dried later.) The front of the fountain is washed once a week with water, bon ami being used. The floor back of the fountain is washed down with a hose, the dirty water being drained off. The plant on the front bar (a decoration) gathers dust and is occasionally washed off with a hose. Everything receives a thorough cleaning. The ice cream cabinets in the fountain are uncoverd once a week, the containers and cracked ice taken out, and the interior washed with hot water. The amount of wood and splinters which accumulates from the melting ice is surprising. Cabinets are all metal. Cabinets or closets in back bar are cleaned out. A surplus of polished glasses is kept in one of these. Every holder on the fountain is polished. Fifty towels are used each week. These are of two kinds, one for rough work, the other for glasses, etc.

The Real Way to Wash Soda Glasses

Dr. Haven Emerson, Deputy Commissioner of Health of New York City, considers the following the proper way to wash dirty soda glasses:

"Use soap and water. Use water just under boiling—at about 180°. Have the water hot enough to make your fingers tingle. Some soda men seem to think they can't stand hot water. The lack of heat in the water used for washing soda glasses is the most general difficulty. With soap and hot water there is no necessity for using any other disinfectant. Then, too, the washing pans should have smooth, metal sides and not sides of wood. The hot water may be obtained by using an electrical coil or small gas heaters."

Polishing Fountain Silverware

The same principles apply in cleaning silverware used in connection with the fountain as those used in cleaning and polishing spoons and plate used at the table. An excellent silver polish may be prepared by gradually adding finely powdered whiting, absolutely free from grit, to alcohol, until the mixture becomes semi-liquid. This is applied to the silver, which should be entirely free from syrup, etc., with a soft rag or sponge, and removed before thoroughly dry by rubbing the surface briskly with a piece of chamois skin. Another formula calls for

Rouge	½ ounce
Heavy carbonate of magnesia	8 ounces
Light precipitated chalk	1 pound

Triturate the rouge with 2 ounces of the chalk for five minutes, and gradually add the rest of the powders. Sift three times. To use, make the powder into a thin paste with equal parts of household ammonia and soft water. This is a very satisfactory formula for domestic use.

Only One Way to Keep the Fount Clean—Keep it Clean!

A well known manager has summed up the sanitation problem by saying "There is only one way to keep a fountain clean—keep it clean." This requires constant attention, a deal of soap, water and elbow grease, but such an expenditure pays big dividends. Equipment kept clean lasts longer. Care in handling syrups and other fountain materials means a big saving in spoiled goods. But most important of all, a sanitary fountain is the first step in good service.

There are two features to service—the man and the manner. The first is a question of the individual dispenser; the second is a matter of the fountain's sundry equipment.

The mainspring of service lies in the dispenser himself. Upon him the dispatch and neatness of the service depends absolutely. He creates the atmosphere of the fountain. For the dispenser himself there have been many rules and regulations laid down, but of all these the analysis of John Wanamaker is most self-helpful, and every man, be he merchant prince or peddler, must help himself. The following "reasons why" are full of suggestion and will help a man to sum up himself:

An unsuccessful clerk does not need to look far for the cause of his trouble. It is generally in himself or herself. It may be one of this dozen of little things that are not little things.

1. *He forgets that his worth is manifest by what he produces in management or sales.*
2. *He finds excuses for not doing instead of finding ways to do what should be done.*
3. *The world goes ahead in almost every direction, and he keeps on the humdrum turnpike where somebody will have to pay the tolls.*
4. *He is not observant, accurate or thoughtful.*
5. *He is sailing by the broken compass of chance.*
6. *He flatters himself by comparing himself in his own mirror instead of with others that have passed him in the race.*
7. *He thinks nobody notices that he has fallen behind.*
8. *He does not love his work as he used to, and therefore his enthusiasms have been lost.*
9. *He puts off too many things until tomorrow.*
10. *He is unconscious of being idle much of his time, and lets the day go by lacking results he could have attained.*
11. *His lack of thoroughness blocks his leadership.*
12. *However honorable he fails to realize that his example affects others.*

To know himself is the first essential to progress in any man whether he be the errand boy or the fountain manager-owner. Next he must know his job. Peter Eichelman, manager of one of Philadelphia's biggest and most successful fountains, is the author of the following "Golden Rules for Dispensers". No fountain employs better service than his, and the practical rules that he and his dispensers follow to get this service will appeal to every man in the business:

Eichelman's "Golden Rules for Dispensers"

"1. When serving customers, always serve crackers first, and then take their order. After a few moments, ask the customer whether the drink is sweet enough or, if it is a sundae, how he likes the fresh fruit we serve. Let them know that we do serve fresh fruit. Give ice water with each sundae.

"2. Never use nicked or dirty glasses at the fountain, as they leave a bad impression about the fountain, which can easily be avoided. If you hear a customer speak about the cleanliness of our glasses, tell him that we employ three men who do nothing but wash glasses and dishes, first using hot water with soap then clean rinsing water, then drying on clean towels.

"3. Be clean about your own person. Act like gentlemen with some intelligence. Don't stand around and talk about the good time you had the night before. Customers as a rule can hear this, and it certainly leaves a bad impression at a first-class fountain. We have everything here to make a successful fountain—good, clean, sanitary conditions, crackers put up in waxed envelopes, fresh fruits, fresh syrups, good fresh eggs, pasteurized milk, best buttermilk, etc. All this shows nothing but quality. But you also must help. Quality alone, without good clean dispensers and service is a failure. To bring success and a large increase in your earnings, you must all work together. Try to have the honor of getting his fountain known as the best in town. You can do this if you will only try.

"4. If you break a glass or spill something, don't get excited or nervous about it. We know that it was not done on purpose, and fellow dispensers should never laugh at it. Try to be careful, but when unfortunate enough to spill a drink, get a clean towel at once, tell the customer you are sorry it happened, and assure him that our Prescription Department will take out all stains.

"5. Always be polite to a customer, no matter whether he is grouchy or polite himself.

"6. Keep drinks from overflowing. No matter how good a dispenser you are, if you let this happen it makes you look like a beginner. This may sound as if all theory to you, but put it into practice and you will soon notice the change. Remember that nine out of ten customers are the kind who, if treated right, will boost your reputation by telling what a good and courteous dispenser you are. Follow this advice; keep it always in mind, and you won't have to worry about the future. Any business is what a man makes it."

With dispensers who are live, clean-cut, true men who know their work and do it well and willingly, the service of a fountain is sure to be good. The manner of service, while subordinate to the men of the service, is, however, also important. Were a blanket rule to be formulated for the sundry equipment of a fountain, the saying "Neat, but not gaudy" would serve admirably. Glasses, silverware, dishes, ornaments—all these should be of the best quality and plain.

Here They Are--Again
The First Strawberries
At Cone's *"a Good Drug Store"*

The first strawberries of 1915! Why no, it's still 1914—we must say the first strawberries of the 1915 season are now being served at Cone's fountain.

The first—and surely it seems they must be the best.

Big, red fellows, as sound and solid as a pippin---

But put one in your mouth!

It melts into the most delicious, full-flavored juice—it is ripe.

First to have them it is true, but still they are not ahead of their time. Grown in the open air in southern Florida, whisked to us by fast express (New York will probably have them tomorrow) they are fine, full-flavored berries.

Served at the fount—

Fresh Strawberry Ice Cream	10c
Fresh Strawberry Ice Cream Soda	10c
Fresh Strawberry Parfait	15c
Fresh Strawberry Short Cake	20c
Fresh Strawberries with Cream	20c

and

for clubs and individuals who would enjoy such delicacies we are prepared to supply them at

60c a Quart

Cone's *"a Good Drug Store"*
---Two Stores---

A Sample of E. H. Cone's Soda "Ad" Copy

Fancies and fussiness are cheap and out of place. Look over in the candy counter and learn a lesson of simplicity in style. It is the 25c candies that come in boxes with beautiful ladies and race horses and cupids and what-not on the covers. The $1.00 a pound box is plain white with just the name of the maker in neat gold letters.

Soda Publicity

All successful soda fountain operators regard the satisfaction of their patrons as an essential, but not all grasp the idea that this form of publicity should be regarded in the light of advertising

The public's soda memory is remarkable. One warm drink on a hot summer day will cause a good soda customer to stay away from a fountain for three years after its entire refrigeration system has been renovated. An overpriced sandwich will drive away a patron who would have contributed to the receipts of both the luncheonette and the fountain.

Men like to eat and drink in one place—it requires less thinking. Once he finds the place that suits him he will make a bee line for it year in, year out. Dislodge from daily line of travel by poor service and he will scurry around until he finds another rut. This characteristic should be profited by. The soda man should insist that his soda and luncheonette maintains a uniformly high standard of service.

Women are more prone to shop for their soda and light lunches than are men, but the business woman of today is limited in time as much as the man. Consequently she has little opportunity to explore. A few expeditions on soda-adventure bent and she settles down to her favorite fountain as a regular customer. As with the man, it is only poor service that will drive her away. Even the woman shopper, erratic though she be, will ultimately travel a definite course on her expeditions downtown or to the city and so it is that the shopping district fountain man will very often recognize familiar faces among patrons, not one of whom the new dispenser expects ever to see again.

Fountain publicity is not always newspaper advertising, ornate poster ads, elaborate circularizing, sandwich signs, free drink coupons, souvenir bouquets, window displays, block ice statues, etc. The very foundation of fountain publicity is to serve your customer that he or she will *come back.*

Soda Satisfaction is Soda Publicity—the cheapest or the most expensive form of fountain advertising. Its cost is inversely proportional to the kind of business you do.

The Window Display

Once the fountain man has assured himself that he is dispensing Soda Satisfaction with his soda, the next best form of soda publicity is the window display. His windows are the best possible medium for giving his goods publicity. This is the assertion of prominent and successful retail merchants the country over.

You are Invited to Attend the

Hallowe'en Party

Our store will be decorated in appropriate designs for the season

Prizes will be given to the lady wearing the most striking costume, and to the gentleman wearing the most comic costume

Hot Cider and Doughnuts
Will be Served Free with Every Order

Hallowe'en Specials

Homemade Pumpkin Pie, a la mode
Jack O'Lantern Sundae
Hallowe'en Special Sandwiches
Orange Marmalade
Orange Highball

HOT DRINKS

Hot Cream Cholcolate
Hot Egg Orangeade
Hot Beef Egg
Hot Apple Cider

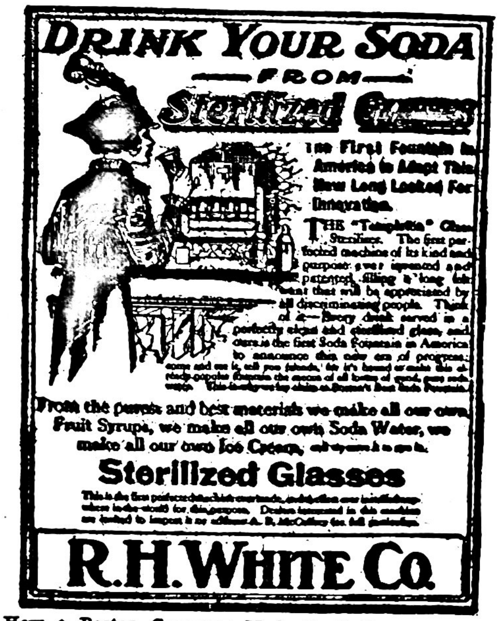
JACKSON'S SODA SHOP
ANGOLA, INDIANA

How Jackson's Announced its Hallowe'en Party

The combination of newspaper space and window display is a powerful one, but if one be eliminated, it would in 999 cases in a thousand be the newspaper space. There are few stocks that will sell in a "blind" store.

Soda fountain window displays have the disadvantage, in comparison with other window displays, in that they must consist, to be of the greatest value, of perishable goods. Of course, the fountain man can place in his window jars of beautiful fruits, bottles of powdered cocoa, cans of chocolate, etc., but while they have their interest, and are perhaps better than nothing, the display is really a "dead" one. Sometimes it is as dead as the interest of the fountain man who forgets to take it out of the window until it is gray with dust.

The "live" window display, the exhibition of fountain goods, which will stop the passerby and bring him or her into the store, must have snap to it. It may contain all the stage "props" of a "dead" display—the canned, bottled, cartoned and otherwise contained stuff, but the "live" characters must be on the stage. The cast for the soda show consists of fresh fruit, sliced open, so the luscious interior may be seen; and this fruit must be watched so that its deterioration does not sicken the audience. The glass of bubbling soda water plays a leading part, and must really bubble. The big bowl of tempting punch must look cool and tempting, not hot and flat. The keynote of the soda window must be "life." For this reason, the display should not be run too long. The perishable goods and the public interest will not permit it.


DRINK YOUR SODA
—FROM—
Sterilized Glasses
The First Fountain in America to Adopt This New Long Looked For Innovation.
From the purest and best materials we make all our own Fruit Syrups, we make all our own Soda Water, we make all our own Ice Cream,
Sterilized Glasses
R.H. WHITE Co.

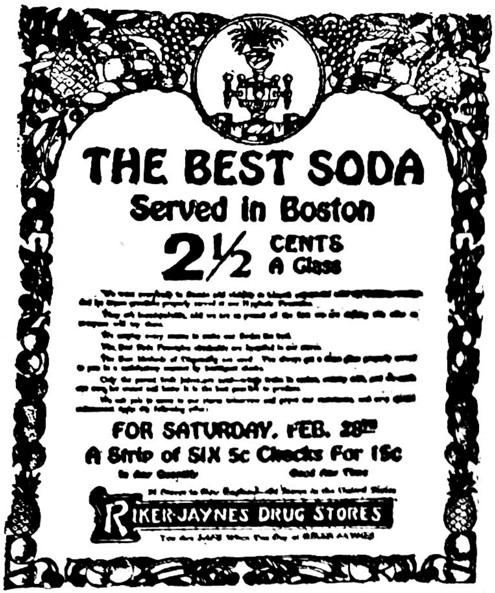
How a Boston Company Made Sanitation a Feature

Another variety of window display might be termed the educative. The fountain operator may here profit much through the cooperation of the manufacturer. The display consists of an exhibition of some fountain product and developes its manufacture from the raw material to the form in which it is served. A display of this variety, frequently shows cocoa beans, shells, powder, pods, etc., to the finished chocolate.

The main thing about any kind of window announcement is to cut it short! The fountain man may write a prize-winning treatise in a newspaper contest, but people won't stop to read it in his window. If the fountain man must use printers' ink in his window he should make the message short and to the point, and should repeat it at every new point of observation.

The managements of few big city fountains can avail themselves of newspaper.

advertising. Newspaper advertising will tend to turn people from their regular lines of travel and is most effective in the retail business in large cities when the advertiser takes his stand in an advantageous location on the stream of traffic.


THE BEST SODA
Served in Boston
2½ CENTS A Glass
FOR SATURDAY, FEB. 28th
A Strip of SIX 5c Checks For 15c
RIKER-JAYNES DRUG STORES

A "Special Sale" Soda Advertisement Featuring the Price

In every small city and every town, however, are soda fountain operators who may use newspaper publicity to advantage, and perhaps the best way to advise these people is to put before them the work and methods of a successful advertiser. Herewith is presented some forcible "strawberry shortcake" fountain ad. talk, which was published by E. H. Cone, in the Atlanta Georgian:

"I want YOU to have some, too. Because what's the use of having something GOOD—if you can not share it with somebody else? That's why I want YOU to know all about it.

"CAN YOU IMAGINE STRAWBERRIES IN DECEMBER?' Gre Red and Ripe and Delicious Strawberries! NOT the kind whose growth is FO under glass at a loss of the flavor. But the Really-truly, Honest-to-go Strawberries that make you think of rosy, pouting lips and Springtime and F and everything that's good."

Other Forms of Fountain Publicity

It is difficult to separate fountain publicity from fountain service. Th fountain in clean, working order—"stripped for action"—will appeal i strongest manner to prospective customers. Ornateness at the fountain desirable. The more a fountain is decorated the more dirt and dust it c and the more it interferes with the movements of those behind the serving Perhaps the best publicity at the fountain consists of plain, simple paster ann ments of the special drinks. These, arranged at regular intervals on the fo mirror serve a purpose and do not have that gaudy, crude appearance that fountains take on when "trimmed" for special occasions.

Fountain publicity may take the form of a special sale, such as the s of one-dollar books of 20 five-cent checks for 50 cents, etc. If the sale of is limited, one or two books to a person, and the books must be redeemed set date, some good may be accomplished by the feature. It brings people t fountain, and no doubt many of those brought in are newcomers. After the the fountain man may have to exercise his faith in future business in lie counting present cash, but it is a fact that a number of successful firms hold sales annually.

Soda publicity may take the form of cooperation with the manufacturer manufacturer wishing to introduce a new product, or an old one to a new terri may be persuaded to distribute sample packages through the medium of the fountain, one package to each soda patron. The soda man may go so far a partially share the expense of such distribution. This is a scheme which has been worked out with much success.

Circularizing the territory of a soda fountain may work wonders. The tribution of neat invitations or of free soda tickets to neighborhood resident the denizens of nearby office buildings has been done with good results. (must be taken, however, to see that these favors get into the right hands. Pompous Merchant is not averse to imbibing a five-cent drink at the foun man's expense, but he is not anxious to be flanked on either side by a wrigg messenger boy. Nor is the "rich Mrs. Smith" pleased to discover that she her stableman patronize the same fount. A little discretion in this direction n save the fountain man much trouble. Only recently in New York City, a fo tain man distributed a large number of free tickets in a certain office building. was not aware that he had thrown an atmosphere of cheapness about his g until on the day of redemption he discovered that the recipients in almost ev case had turned the tickets over to the office boy.

FOUNTAIN NOMENCLATURE

With Definitions and Classifications

A—BASIC MATERIALS

The basic materials from which are made the thousand and one drinks and delicacies served at the modern soda fountain have been defined by the Department of Agriculture and various State Boards of Health. The technical descriptions serve at once as an official definition and a standard of purity. As such they are doubly valuable to dispensers.

(a) Sugars and Syrups.

1. **Sugar**—is the product chemically known as sucrose (saccharose), chiefly obtained from sugar cane, sugar beets, sorghum, maple and palm.

2. **Granulated, loaf, cut, milled and powdered sugars.**—Simply different forms of sugar which contain at least 99.5% of sucrose.

3. **Simple (Sugar) Syrup.**—The product made by dissolving sugar to the consistency of a syrup and containing not more than 35% of water.

4. **Rock Candy Syrup.**—A heavy, concentrated sugar syrup just below the crystallization point, and having a specific gravity of about 1.320 at 15°C. As commercially obtained it is a heavy syrup from which candy is crystallized, or it may be prepared by dissolving sugar in the form of rock candy in water to produce a syrup of the proper density. It should be free from insoluble salts, coloring matter (ultramarine, etc.), and glucose, and not contain more than a slight amount of inverted sugar.

5. **Concentrated Fruit Syrup.**—Heavy syrup made by dissolving about 3½ pounds of granulated sugar in one quart of pure fruit juice of the required flavors; heating to the boiling point, straining and bottling. When wanted for fountain use this concentrated or "stock" syrup is diluted to the proper strength with simple syrup. Citric or fruit acid is frequently added to increase the acidity of these syrups.

6. **Fountain Syrup.**—The product of mixing the expressed juices of pure, ripe fruits or extracts of coffee, ginger or aromatics with simple syrup; or of cooking with sugar or syrup, as in the manufacture of chocolate syrups.

7. **Maple Sugar.**—The solid product resulting from the evaporation of maple sap and contains, in the water-free substance not less than 0.65% of maple sugar ash.

8. **Maple Syrup.**—The product of the evaporation of maple sap or solution of maple concrete and contains not more than 32% of water and not less than 0.45% of maple syrup ash.

9. **Honey.**—The nectar and saccharine exudations of plants gathered, modified and stored in the comb by honey bees; it contains not more than 25% of water, not more than 0.25% of ash, and not more than 8% of sucrose.

a. **Comb Honey.**—Honey contained in the cells of the comb.

b. **Extracted Honey.**—Honey which has been separated from the u crushed comb by centrifugal force or gravity.

c. **Strained Honey.**—Honey which has been removed from the comb straining or other means.

10. **Caramel.**—Literally burnt sugar, is prepared by heating sugar with occa sional stirring at about 180° to 200°C., until a black viscid mass is formed, an adding to this while cooling one and a quarter times its weight of hot water. Th resulting solution, after straining, is used for coloring purposes.

(b) Milk and Its Products.

1. **Milk.**—The fresh, clean, lacteal secretion obtained by the complete milkin of one or more healthy cows, properly fed and kept, and contains not less than 8.5% of solids not fat, and not less than 3.25% of milk fat.

a. **Blended Milk.**—Milk modified so as to have a definite and stated percentage of one or more of its constituents.

b. **Skim Milk.**—Milk of which a part or all of its cream has been removed and which contains not less than 9.25% of milk solids.

c. **Pasteurized Milk.**—Milk that has been heated to a point below boiling but sufficiently to kill most of the active organisms present, and immediately cooled to 50°F. or lower.

d. **Sterilized Milk.**—Milk that has been heated to the temperature of boiling water, or higher, for a length of time sufficient to kill all the organisms present.

e. **Condensed Milk (Evaporated Milk).**—Milk from which a considerable portion of water has been evaporated and which contains not less than 28% of milk solids, of which not less than 27.5% is milk fat.

f. **Sweetened Condensed Milk.**—Milk from which a considerable portion of water has been evaporated and to which sugar (sucrose) has been added, and which contains not less than 28% of milk solids, of which not less than 27.5% is milk fat.

g. **Condensed Skim Milk.**—Skim milk from which a considerable portion of water has been evaporated.

2. **Buttermilk.**—The product that remains when butter is removed from milk or cream in the process of churning.

3. **Whey.**—The product remaining after the removal of fat and casein from milk in the process of cheese-making.

4. **Kumyss.**—The product made by the alcoholic fermentation of mare's milk or cow's milk.

5. **Cream.**—Cream is that portion of milk, rich in milk fat, which rises to the

rface of milk on standing, or is separated from it by centrifugal force, fresh and ean, and contains not less than 18% milk fat.

a. Evaporated Cream (Clotted Cream).—Cream from which a considerable portion of water has been evaporated.

b. Whipped Cream.—Cream whipped or beaten to a stiff, spongy consistency and sweetened to taste.

(c) Fruits, Berries, and Their Products.

1. Fruits.—The clean, sound, edible, fleshy fructifications of plants, distinguished by their sweet, acid and ethereal flavors.

2. Berry.—In its restricted sense, the product of certain small shrubs or vines, such as gooseberries, blackberries, raspberries, etc.

3. Dried Fruit.—The clean, sound product made by drying mature, properly prepared, fresh fruit in such a way as to take up no harmful substance, and which conforms in name to the fruit used in its preparation.

a. Sun-dried Fruit.—Made by drying without artificial means.

b. Evaporated Fruit.—Made by drying with artificial means.

4. Crushed Fruit.—Clean, sound fruit, prepared with sugar, and heated to a point sufficient to destroy the greater part of the organisms, thus preventing fermentation, without heating to a point sufficient to cook and thus destroy the flavor and characteristics of fresh fruit.

5. Canned Fruit.—The sound product made by sterilizing clean, sound, properly matured and prepared fresh fruit by heating, with or without sugar, and spices, and keeping in suitable, clean, hermetically sealed containers, and which conforms in name to the fruit used in its preparation.

6. Preserve.—The sound product made from clean, sound, properly matured and prepared fresh fruit and sugar syrup, with or without spices or vinegar, and which conforms in name to that of the fruit used. In its preparation not less than 45 pounds of fruit are used to each 55 pounds of sugar.

7. Glace Fruits.—Fruits treated with sugar syrup which is subsequently allowed to crystallize, also known as candied or crystallized fruit.

8. Jellies.—The product produced by cooking the pure juice of fruits or berries, expressed from the pulp, with approximately equal portions of pure cane sugar.

9. Fruit Juices.—The expressed juices from the pulp of fruits and berries, ordinarily prepared by pasteurization to prevent fermentation, and not so sterilized by heat as to cook and change the character and taste of the product.

a. Grape Juice.—The pure, undiluted and unfermented juice of grapes produced by crushing and sterilized by heat at a temperature of from 165°F. to 176°F., above which point the product is cooked and loses its distinctive flavor. When so prepared no artificial preservative is required. Normal grape juice contains no alcohol, glycerin, etc., has from 20-24% grape sugar, and some acids, mainly tartaric acid, mineral substances and protein. They are all substances of nutritive or therapeutic value.

10. Fruit Concentrates or Concretes.—(See Flavorings.)

(d) Flavors and Extracts.

1. Flavoring Extracts.—Solutions in ethyl alcohol of the flavoring and odorous principles derived from an aromatic plant or parts of a plant, with or without its coloring matter, and which conform in name to the plant used in their preparation.

2. Terpeneless Extract.—The flavoring extract derived by shaking an essential oil with dilute alcohol, or by dissolving a terpeneless oil (from which the constituents related to the turpentine group have been removed) in dilute alcohol.

3. Fruit Concentrates or Concretes.—The product resulting from the treatment of fresh fruit pulp, properly prepared and matured, so as to preserve its full odor and taste by the removal of its watery constituents without loss of flavor and with natural concentration of all its useful constituents into small bulk.

(e) Tea, Coffee and Cocoa Products.

1. Tea.—The leaves and leaf buds of different species of *Thea*, prepared by fermenting, drying and firing.

2. Coffee.—The seed of *Coffea arabica*, or *Coffea liberica*, freed from all but a small portion of its husk or outer skin.

Roasted Coffee.—Coffee, which by the action of heat, has become brown and developed its characteristic aroma.

3. Cocoa Beans.—The seeds of the cacao tree.

Cocoa Nibs, Cracked Cocoa.—The roasted, broken cocoa bean freed from its shell or husk.

4. Chocolate, Plain Chocolate, Bitter Chocolate, Chocolate Liquor, Bitter Chocolate Coatings.—The solid or plastic mass obtained by grinding cocoa nibs without the removal of fat or other constituents except the germ.

Sweet Chocolate, Sweet Chocolate Coatings.—A chocolate mixed with sugar, with or without the addition of cocoa butter, spices, or other flavoring materials.

5. Cocoa, Powdered Cocoa.—Cocoa nibs, with or without the germ, deprived of a portion of their fat and finely pulverized.

Sweet Cocoa, Sweetened Cocoa.—Cocoa mixed with not more than 60% of sugar.

(f) Special Beverage Materials and Mineral Water.

1. Citric Acid.—A tri-basic acid prepared from the juice of limes, lemons and other fruits produced by species of *Citrus*. It should contain not less than 99.5% of pure citric acid, and otherwise conform to the standard prescribed by the United States Pharmacopoeia.

Fruit Acid.—A name employed by fountain operators to indicate a solution of citric acid, usually made by dissolving 2 ounces of citric acid in sufficient water to make a solution measuring 4 fl. ounces. This solution is extremely liable to spoil, and only small quantities should be made at one time. When part of the water is replaced with alcohol the solution is said to be more permanent. Tartaric or mineral acids are inadmissible under the name of "fruit acid," and it is in violation of law to use them as substitutes.

2. Solution of Acid Phosphates (Acid Phosphates)—Made by adding sulphuric acid and water to bone ash and expressing as directed in the National Formulary. Under the Pure Food and Drugs Act the preparation so made is the only solution which, without other qualification, is legally entitled to the use of the name.

3. Foams.—A mucilaginous or saponaceous mixture added to carbonated beverages to increase their gas-retaining or foam-holding properties. Among the substances used for the purpose are gum arabic, gelatin, white of egg, and quillaja (soap bark). Quillaja contains saponin, an acrid, irritating glucoside which renders the beverage to which it is added open to criticism; its use as a foam in some States is forbidden. Fruit syrups properly made from natural fruit juices, particularly where cream is used, need nothing to hold the foam, especially if the water is cold and highly carbonated. In most cases an ounce of gum arabic foam to the gallon of syrup is sufficient.

4. Mineral Water.—Non-contaminated natural water recommended as a beverage on account of its special therapeutic or hygienic properties. A manufactured mineral water, made in imitation of a natural water, may be named after such natural water in case the words "imitation" or "artificial" are used, but such manufactured waters must clearly resemble in chemical composition the natural waters after which they are named.

(g) Carbonic Acid Gas.

1. Carbonic Acid Gas.—(Carbon dioxide CO_2.) At ordinary temperatures it is a colorless, transparent, tasteless (by some thought to be sweetish) gas. By a pressure of 38 atmospheres, at a temperature of 0°C. (32°F.), carbon dioxide is converted into a colorless liquid (*liquid carbon dioxide*). All carbonates liberate carbon dioxide when brought in contact with dilute acids. Carbon dioxide is also evolved in the process of fermentation as carried on in the brewing industries, and this source is extensively utilized for the commercial production of the gas at the present time. (For materials used in manufacture, see below.)

2. Carbonated Water.—("Plain soda.") Water saturated with carbonic acid gas, with resulting sparkle and pungency, to a pressure of from 150 to 200 pounds. The appellation "soda water" is a misnomer, as the liquid contains no soda in any form, but it continues to "stick."

3. Sodium Carbonate.—("Soda," neutral carbonate of soda, sal soda, washing soda, etc.) One of the most important of the sodium compounds for industrial purposes, and is employed as a source of carbonic acid gas which is evolved when the sodium carbonate is treated with sulphuric acid.

4. Sodium Bicarbonate.—(Baking soda and also acid sodium carbonate.) Occurs in small, rectangular prisms, which to the naked eye appear as a white, opaque powder. The salt is odorless, has a cooling, mildly alkaline taste, and is permanent in dry, but slowly decomposed in moist air. Also a source of carbonic acid gas when treated with sulphuric acid.

5. Calcium Carbonate.—Found in enormous deposits as limestone, marble, chalk, calcite, Iceland spar, and as the mineral basis of the corals, shells of the crustacea, etc. Prepared chalk is a native chalk, one of the common forms of calcium carbonate purified by grinding the chalk in water, allowing the mixture to partially subside, decanting the upper portion, allowing it to settle, and collecting and drying the fine powder. "Whiting," essentially the same as prepared chalk, is used in the production of carbonic acid gas.

6. Sulphuric Acid.—A colorless liquid, of oily consistence, inodorous, and very caustic and corrosive. As defined by the U. S. Pharmacopoeia, it should contain not less than 92.5% of absolute sulphuric acid, and about 7.5% of water. It should be handled with great care.

B—FROZEN PRODUCTS

The Standard Definitions adopted by the Association of Official Agricultural Chemists of the United States, and the Interstate Food Commission, and published in Circular No. 19, U. S. Department of Agriculture follow:

1. Ice Cream.—A frozen product made from cream and sugar, with or without a natural flavoring, and containing not less than fourteen (14) per cent. of milk fat.

2. Fruit Ice Cream.—A frozen product made from cream, sugar and sound, clean, mature fruits, and contains not less than twelve (12) per cent. of milk fat.

3. Nut Ice Cream.—A frozen product made from cream, sugar and sound, non-rancid nuts, and contains not less than twelve (12) per cent. of milk fat.

Trade Definitions Perfected by Usage.

All ice creams are classified by the ice-cream trade according to both ingredients and methods of preparation. *Philadelphia ice cream* is made without eggs. *Neapolitan*, *Delmonico* and *French* ice cream call for eggs, and include cream with a cooked body. But cooked body creams, made with eggs, flour or cornstarch, and cream or milk, are more properly designated *Frozen Custards*.

1. Plain Ice Cream.—Made from cream, sugar and flavoring, the latter either extract or such natural flavoring as coffee or chocolate, or the juice (not the pulp) of lemons, oranges or pineapples. (An ice cream made with grape *juice* would be a *plain* cream; one made with *pulp* would be a *fruit* cream.)

2. Fruit Ice Cream.—Made from sugar, cream and the pulp of clean, ripe fruit—strawberries, peach, pineapple, etc.—with or without additional flavoring.

3. Nut Ice Cream.—Made from cream, sugar and sound, non-rancid nuts. The nut meats must be incorporated, whether chopped, crushed or whole, for if the cream is flavored with peanut or almond oil it is a plain cream, as there are no nuts in it.

4. Bisque Ice Cream.—Made from cream, crumbled bread or cake, macaroons, nabiscos, grape nuts, etc., or such confections as marshmallows.

5. Sherbet.—(Water ice.) Made from water, sugar, egg whites and natural fruit flavoring. (See also Fountain Sherbet.)

6. Parfait.—Made from sugar, cream and egg yolks, and may contain fruit, nuts or natural flavoring.

7. Souffle.—Made exactly the same as a sherbet except that the whole egg is used instead of the whites.

8. Milk Sherbet.—Made from milk, egg whites and flavoring. All the sherbets, no matter what the designation, must be frozen as smoothly as ice cream, for there are other titles for other sherbet formulas when frozen differently. For instance:

9. **Frappe.**—A half-frozen product containing water, sugar and fruit juice or natural flavoring, which when made according to formula is about the consistency of moist snow. They are simply half-frozen sherbets with the white of eggs omitted.

10. **Frozen Punch.**—Sherbet with an alcoholic flavoring; at the fountain frozen punches are sherbets with high flavor or with a mixture of several fruit juices.

11. **Frozen Pudding.**—Cream or rich milk, eggs, a filler of either flour or cornstarch, usually nuts, glacé fruits or crystallized cherries, citron, etc., and highly flavored before freezing. Caterers' frozen pudding or that served by hotel chefs is ordinarily flavored with Santa Cruz rum. Fountain frozen pudding cannot, of course, contain liquor, but is always highly flavored.

12. **Mousse.**—A frozen whipped cream to which has been added sugar and natural flavoring; if fruit flavors are used only the juice is employed. It must be light and spongy in texture or it belies its name.

13. **Lacto.**—A frozen product made of buttermilk, skimmed milk or whole sour milk, the product being indicated as "Buttermilk Lacto," etc. With the milk sugar, and flavoring are employed as in ordinary ice cream.

14. **Plombiere.**—A neapolitan ice cream mixture, to which has been added before freezing, citron, greengages and pineapple, all chopped fine.

15. **Aufait.**—A brick or moulded ice cream packed in layers with one or more layers of frozen fruit (preserved or candied figs, etc.)

16. **Baked Alaska.**—A solidly frozen brick of ice cream which has been wrapped in a thick meringue of powdered sugar and egg whites whipped thoroughly and then placed in a very hot oven until the meringue browns. The cream will not melt if the oven is hot enough. A typical hotel dainty, which cannot be served economically at either luncheonette or soda fountain.

17. **Glace.**—Glace' in the trade means coated or glossed over, and bombe', moulded, hence a bombe' glace' is a moulded cream served with a colored meringue. Raspberry Bombe' Glace', for instance is made by lining a mould with raspberry sherbet, filling it with vanilla ice cream or moussé, and then topping with either mousse' or meringue and freezing.

C—FOUNTAIN DRINKS

(a) Sodas

1. **Straight Soda.**—(Solid soda. Plain soda.) A mixture of carbonated water and syrup, such syrups as do not harmonize with or contain milk or cream, as ginger, orange, lemon, ambrosia, grape fruit, nectar, raspberry, mint and cherry.

2. **Cream Soda.**—A mixture of carbonated water, cream or milk and such syrups as chocolate, vanilla, coffee, maple, etc.

3. **Creme.**—A syrupy liqueur, the principal flavor being usually specified, as creme de menthe, creme de rose, creme yvette, etc. As a fountain beverage the creme is related to the cream sodas, being very sweet and made with syrups of distinctive flavor, cream or milk, and topped with whipped cream.

4. **Ice Cream Soda.**—A measured quantity of ice cream added to the mixture of syrup and carbonated water. The best fountains use chocolate, vanilla and strawberry ice cream with syrups of the same flavor. In some fountains milk or cream is also added to the beverage, which is served with a spoon.

(b) Mixed Fruit Drinks

1. **Punch.**—At the soda fountain must be non-alcoholic, the place of the liquor being taken by a combination of crushed and sliced fruits, fruit juices and syrups, and usually the grated rinds of oranges and lemons. Mixed in quantity it is served from a glass bowl containing a cube of ice, some of the fruit being placed in each glass. If mixed, individually shaved ice, carbonated water, fruit syrups and sliced fruit or glacé cherries are added, and sometimes a sprig of mint.

2. **Ades.**—The juice of citrus fruit, lemon, orange or lime, with sufficient powdered sugar or simple syrup to sweeten, to which is added plain, mineral or carbonated water. It is customary, however, to designate the drink by prefixing the name of the water employed, as "seltzer lemonade." In fruit ades, slices of fruit, glace', cherries, etc. are added ingredients. All ades should be served very cold with straws.

a. **Golden Ade.**—Made by adding the yolk of an egg before shaking.

3. **Float.**—An ade upon the top of which is floated a layer of grape juice, ginger ale, or in some cases, a disher of fruit sherbet or ice cream. In the latter case it would be known as a "sherbet float" or an "ice-cream float."

4. **Freeze.**—An ade or punch in which the shaved ice is allowed to remain when serving (to produce a very low temperature, hence the name), and ordinarily served with fruit, a sprig of mint, and straws.

5. **Smash.**—Similar to a freeze, and generally made with syrups of a rich, fruity flavor, shaved ice and carbonated water, the beverage being served in thin glasses with straws. Sometimes two or three dashes of solution of acid phosphate are added, and occasionally a sprig of mint.

6. **Fizz.**—Made from acid syrups, lemon, pineapple, etc., usually with lime juice or a dash of bitters, and served while effervescing. The fizz effect is gained after shaking by using the fine stream in quick dashes, or by the addition of a little sodium bicarbonate.

a. **Silver Fizz.**—If the white of an egg is added and the drink shaken it becomes a silver fizz.

b. **Golden Fizz.**—If an egg yolk is used the drink is a golden fizz.

7. **Cup.**—Fruit juice added to shaved ice and flavored with lemon and lime juice, the addition of carbonated water produces the cup, as grape cup or claret cup.

(c) Phosphates and Bitters

1. **Phosphates.**—A straight soda, with one or more flavors, to which dashes of solution of acid phosphate (see above, Basic Materials (f) 2) have been added. Usually served in a small, thin glass.

a. **Egg Phosphate.**—An egg is added to a phosphate and the beverage well shaken before serving.

2. **Rickey.**—Nearly related to the phosphate is the rickey, the juice of a lime, a fruit syrup and carbonated water combined, but not shaken, lime juice always being a component.

3. **Bitters Shake, or Cocktail.**—A straight soda to which is added a das two of bitters as Angostura, wild cherry, elixir calisaya, etc.

(d) Mixed Fancy Drinks

1. **Shake.**—Any syrup or combination of syrups may be used, sometimes with addition of solution of acid phosphate. Shaved ice is added with a little plain w It is then shaken and strained and the glass filled with carbonated water. The sha can be done by hand with a shaker or by machine.

a. **Milk Shake.**—The milk shake is made without carbonated water the shaking together of syrup and rich milk, either with or without crushed i and then serving after straining.

b. **Ice Cream Shake.**—An ice cream shake is made in a similar manne the ice cream being added before shaking.

c. **Egg Shake.**—When an egg is added to a milk shake prior to the shak it becomes an egg shake. Acid flavors should never be used in any of these they curdle the milk.

2. **Nogg.**—Either hot or cold, is a combination of egg, milk or cream, sugar aromatic flavor (not an acid), over which grated cinnamon or nutmeg is us sprinkled before serving. It differs from a milk shake or milk and egg shake in the egg, milk and sugar are *beaten together* into almost emulsion form, before the fla etc., is added, and before the final shaking.

3. **Puff.**—A combination beverage containing one or more kinds of syrup, whipp cream or ice cream, white of egg, shaken well together. Into this carbonated wa fine stream, is injected in quick dashes, and a maraschino cherry is added befo serving. Serve with a spoon.

(e) Hot Drinks

1. **Hot Chocolate.**—Chocolate powder, paste, or syrup, sweetened, with milk or water, usually topped with whipped cream and served in a cup with cracke nabiscos, etc.

a. **Cocoa.**—Made in the same way, cocoa powder being substituted for chocolate.

2. **Tea.**—The leaves of tea steeped in boiling water, served in a cup with lum sugar and cream or sliced lemon.

3. **Coffee.**—An infusion or decoction of ground coffee, made by percolation (o boiled) with hot water and served with lump sugar and cream or whipped cream cups.

4. **Soup.**—Meat, fish, or vegetables boiled with seasoning in water.

5. **Bouillon.**—A clear soup that has been strained

6. **Chowder.**—Usually made with fish and served with various vegetables an potatoes cut in small dice in it.

(f) Specialty Beverages

1. **Root Beer.**—A non-alcoholic drink made from extracts of various roots, an prepared for the fountain by the addition of syrup and carbonated water. This cla includes Ottawa beer, sarsaparilla, and similar beverages which do not require the addi tion of cream and are mixed from the syrup and carbonated water. It is the commo practice to carbonate such beverages in tanks and draw them from the draught ar of the fountain, or from a special dispenser.

2. **Pop.**—A non-alcoholic beverage made with sugar, flavoring (ginger, lemo etc.), and carbonated water, and marketed in bottles. It is so named because the co is expelled with a pop from the bottle on opening.

3. **Ginger Ale.**—A non-alcoholic beverage prepared from sugar, water and soluble extract of ginger flavored with various aromatic substances or essential oils frequently combined with capsicum or the pungent principle of capsicum, and charged with carbonic acid gas.

4. **True Mead.**—A product caused by the fermentation (with yeast or malt) of honey with two or three times its weight of hot water. It is alcoholic and cannot be served at the fountain.

a. **Mead Syrup.**—A product of aromatics and spices (such as mace, cloves cinnamon, ginger, wintergreen and sassafras) and honey and water, heated to gether until the resulting syrup is impregnated with the flavor of the aromatics or mead extract may be used.

b. **Mead Extract.**—In this preparation the honey flavor is simulated by the employment of sassafras, wintergreen, etc., from which drugs in crude form the extract is derived by percolation with alcohol; or by mixing certain syrups and extracts to simulate the honey and spice flavor.

D—FOUNTAIN DELICACIES

1. **College Ice.**—A service of a measured quantity of shaved or crushed ice, or, in some cases, a plain ice cream or sherbet of one flavor, with one kind of syrup or crushed fruit.

2. **Sundae.**—A service of a measured quantity of ice cream with one or more syrups, crushed fruits, nuts, or whipped cream, with or without a dressing or topping It is in reality an elaborated college ice.

3. **Dessert.**—The dessert is an elaborate sundae, with one or more flavors of ice cream, sherbet, crushed or glacé fruits, nuts, whipped cream, cake or nabiscos and usually served with a fancy dressing. Under this designation such a dish as a banana split would naturally fall. In reality, the college ice and sundae are le elaborate desserts.

SODA FOUNTAIN FORMULAS

(1) SYRUPS, EXTRACTS, AND FOAMS

The very basis of quality sodas and sundaes—the kind that bring patrons back to your fountain again for more—is good syrups, and the syrups are essentially sugar, water, and flavoring. Pure water is therefore the first necessity in making good sodas and good sundaes. If the city or town water is not clear and free from all bacteria, it should be distilled. This can be done at a cost of about *half a cent* a gallon, and is worth it! The sugar from which syrups are made should be free from the blue coloring matter which is sometimes added to give table sugar the whiteness housewives demand. The use of good grade granulated sugar in syrup making is true economy.

Fountain syrups even though made with pure water and good, clean sugar must be properly flavored. In making fruit syrups, none but ripe, sound, clean fruits should be employed. When extracts are used, only the highest grade will give satisfactory results.

In making chocolate and coffee syrups, the secret depends not so much upon the brand or blend employed or upon the special process used as upon a combination of just the best process for the particular chocolate and coffee employed. These two very popular flavors are often regarded by the public as a criterion by which they judge a fountain, and in making these syrups the greatest care should be exercised. A little experimenting will often prove to be very useful in obtaining the best possible results.

All syrups spoil—fruit syrups, chocolate, and coffee syrups easily deteriorate owing to the fact that they are readily attacked by spores and bacteria. It is economy therefore, especially during the warm months, to make up but little syrup at a time. In this connection it is well to note that heavy simple syrup keeps much longer than the fountain syrups, and it pays both in keeping qualities and also in storage facilities to have simple syrup in concentrated form.

The following general rules will be found to be invaluable in the syrup room:

1. Use only the best and purest materials.
2. Have all utensils scrupulously clean.
3. Do not cut acid fruits with a steel knife.
4. Fruit syrups should be cooked in agate or glass vessels, and if they are boiled too hard will lose much of their natural aroma and flavor.
5. Extracts should never be added to hot syrups—they are thereby lost through evaporation.
6. Syrups should be kept in sterile bottles, closely stoppered, and in a cool place, preferably upon ice.
7. Use coloring matter sparingly and eschew the old fashioned "foams." Brilliant, frothy sodas are suspiciously unpopular these days.
8. Throw out any syrup that has "turned"—it is false economy to try and sell such stuff—and profit by the experience to make up smaller quantities and keep them better.
9. Remember that syrup making is not a boy's job—it is a fine art.

* * *

SYRUPS

HINTS ON SYRUPS

Keep your extracts in a cool, dark place.

Never add flavoring extracts to hot syrup. It will cause them to evaporate and weaken the flavor.

Keep all your mixing utensils scrupulously clean.

Never mix your fruit syrups nor let them stand in the same vessels in which you mix or keep sarsaparilla, ginger, and similar extract flavors.

If possible always use distilled water in making syrups.

Make up your simple syrup often so that it will always be fresh.

Never allow a syrup containing acid to come in contact with any metal except pure block-tin.

Clean syrup jars each time before refilling.

Keep all packages of concentrated syrups and crushed fruits tightly corked.

Only mix a small quantity of crushed fruit in the bowl at a time so as to have it always fresh.

Use nothing but the best ingredients in making your syrups.

ALMOND

Put 6 ounces of pulverized sweet almonds and 2 ounces of bruised bitter almonds into a saucepan with 1 quart of water, and let them simmer for a quarter of an hour; then add 1 pound of sifted sugar. When dissolved, strain through a hair sieve or jelly-bag, and add a teaspoonful of orange flower water. When cold, a wineglassful of the mixture should be put into a tumbler, which should be filled up with soda or seltzer water.

AMBROSIA

One-half gallon of raspberry syrup, 2 ounces of soda foam, ½ gallon of vanilla syrup.

AMBROSIA SYRUP

Orange syrup	1 quart
Vanilla syrup	1 pint
Strawberry syrup	1 quart
Port wine	3 ounces

Color red.

AMBROSIA

Raspberry juice, 1 quart bottle; hock wine, ½ pint; extract of vanilla, 2 ounces; granulated sugar, 6 pounds; water, 2 pints. Dissolve the sugar in the raspberry juice and water at a boiling point, strain, and when cool add the extract and wine.

AMBROSIA RICKEY

Syrup of raspberry	2 parts
Syrup of orange	1 part
Syrup of pineapple	1 part

Into a glass squeeze the juice of half a lime, add 1 ounce of the foregoing syrup and then half fill with shaved ice; shake vigorously and add sufficient carbonated water to fill the glass. Serve with straws.

APRICOT

Three quarts of simple syrup, 1 quart of apricot juice, 2 ounces of soda foam, ½ ounce of citric acid solution. Color orange.

APRICOT

Apricot pulp (French)	1 pint
Solution of citric acid .	1 ounce
Rock candy syrup	3 pints
Orange flower water ...	1 pint

Two ounces to 14-ounce glass; crushed ice and straws. If this syrup is to be used with milk or cream it might be well to eliminate the citric acid solution from the formula.

BANANA

Peel any number of bananas, cut them in thin slices, and put in a wide-mouthed bottle of sufficient capacity; first a layer of banana slices, then a layer of sugar, until the bottle is filled, having as much sugar as banana. Place the bottle in a vessel of cold water, set it on the fire, and when the water boils remove the bottle containing the bananas. Stir the contents thoroughly for several minutes, and when cool press through a fine sieve or coarse linen cloth. Use as much of this as may be necessary to give a good, strong flavor.

BANANA

Peel and slice two bananas and beat them in a mortar until all lumps are reduced. Then gradually add about two pints of syrup, mixing the whole thoroughly after each addition. Lastly, add sufficient soda foam. This syrup should be made fresh each day, the quantity left at the close of each day being thrown away. The flavor may be strengthened by the addition of a small amount of banana essence. Instead of adding syrup to the bananas, the latter may be made into a smooth paste with hot water, then heated gently, 24 ounces of sugar being added for every pint of water used. Dissolve the sugar and add sufficient soda foam.

BANANA

Banana juice, 1 quart bottle: granulated sugar, 3 pounds. Mix, dissolve by heat, strain, and when cool add: Liquid foam, 1 ounce; fruit acid, 1 ounce; simple syrup, 4 pints.

BELFAST GINGER ALE

Dissolve 1 pound solid ginger ale extract in 1½ gallons of water at a temperature of 150° F., and filter through filter paper.

Dissolve 40 pounds of best granulated sugar in 6½ gallons warm water, and add 2½ ounces sugar color. Mix thoroughly with the dissolved and filtered extract and filter the whole through heavy flannel or a felt filter bag. Before using add to each gallon of syrup 1 ounce fruit acid.

BLOOD ORANGE

Fresh orange juice, 2 pints; water, 2 pints; sugar, 6 pounds; cherry juice (to color), ½ pint; solution of citric acid (1 in 2), 1 fluidounce.

BLOOD ORANGE

Tincture of orange .	2 fl. ounces
Solution of citric acid (50 per cent.) ...	2 fl. ounces
Raspberry juice ...	8 fl. ounces
Simple syrup, sufficient to make	1 gallon

Mix and strain through flannel. Tincture of orange for the above is made as follows: Oil of orange, 1 fl. ounce; peel of 2 oranges; alcohol, q. s. to make 1 pint. Mix and filter. Blood orange syrup may also be made by adding 1 fl. ounce of compound tincture of cochineal to every gallon of ordinary orange syrup.

BLOOD ORANGE SYRUP

Fresh orange syrup ...	1 gallon
Juice of 12 raspberries ...	

Color a light red.

CAPILLAIRE

Maidenhair	8 ounces
Boiling water	5 pints
Orange flower water ..	4 ounces
Sugar	sufficient

Infuse the maidenhair in boiling water. When nearly cold press out the liquid and filter. Add the orange flower water and dissolve in the solution about 7 ounces of sugar to each 4 fl. ounces of liquid.

CARAMEL

Extract of coffee	3 drams
Extract of vanilla	1 dram
Caramel	2 drams
Chocolate syrup	2 pints
Syrup to make	1 gallon

This syrup may be used to flavor a milk shake or egg drink, or as a sundae sauce.

CATAWBA

Three and one-half quarts of heavy simple syrup, 1 pint of catawba wine, 2 ounces of soda foam, ½ ounce of citric acid solution. Color red.

CELERY SYRUP

Lemon syrup	1 ounce
Celery extract	2 dashes

CHAMPAGNE

Crabapple extract	1 ounce
Pineapple juice	3 ounces
Citric acid	4 ounces
Simple syrup	1 gallon

CHAMPAGNE

Florida orange wine, 3 pints; water 1 pint; granulated sugar, 6 pounds. Dissolve by agitation or percolation, and add 1 ounce liquid phosphate.

CHERRY

Cherry juice, 1 quart bottle; granulated sugar 3 pounds. Mix, dissolve by heat, strain, and when cool add cochineal coloring, 1 ounce. Mix well, and then add: Liquid foam, 1 ounce; fruit acid, 1 ounce; simple syrup, 4 pints.

CHERRY

As the varieties of good cherries are not as abundant as in some other countries, it is best to use, as far as possible, the black varieties, which are of fine flavor and good color. Stone the cherries, pound about one-tenth of the kernels to a paste, mash and mix well together, let stand for a short time, stirring occasionally, and strain.

CHERRY COOLER

Cherry juice	10 ounces
Ess. of bitter almonds	1 dram
Sweet cider	2 quarts
Fruit acid	2 ounces
Foam extract	1 ounce
Sugar	5 pounds

Dissolve the sugar in the cider (pure apple juice) by stirring; do not heat; when dissolved add the other ingredients, mix well and strain.

CINNAMON

Oil of cinnamon, ½ fluidram; magnesium carbonate, 1 dram; water, 2 pints; sugar, 56 ounces. Rub the oil of cinnamon with magnesium carbonate, then gradually add the water, continuing the trituration; filter through paper, and in the filtrate dissolve the sugar.

CINNAMON (ARTIFICIAL)

One gallon of simple syrup, 10 drops oil of cassia, 2 ounces of soda foam. Color pink.

CHECKERBERRY SYRUP

Checkerberry essence or extract	1½ ounces
Simple syrup, enough to make	1 gallon

Color pink.

CLARET

Three quarts of simple syrup, 1 quart of claret wine, 1 ounce of citric acid solution, 2 ounces of soda foam. This syrup will be very thin unless sugar is added—14 pounds might be an advisable quantity. Bring to a boil.

CLOVE

One gallon of simple syrup, ½ ounce of essence of clove, 2 ounces of soda foam. Color pink.

CLUB COLA

Make a syrup of 2 drams of fluid extract kola, 6 drams tincture cinchona, enough fruit syrup to make 32 ounces. Make the fruit syrup by mixing 16 ounces wild cherry phosphate syrup, 4 ounces vanilla syrup, 4 ounces orange syrup, 4 ounces lemon syrup, and 4 ounces strawberry syrup. Serve solid.

COCOA MENTHE

Chocolate syrup	½ gallon
Mint syrup	½ gallon

Mix and strain and serve with cream. May be served as a milk shake or egg drink. For two ounces syrup and balance (to 10 ounces) milk, charge five cents; all milk and egg (12 ounces), 15 cents.

CONCENTRATED ORANGE

Grate 4 large oranges in a mortar, add 1 pound of sugar and rub it thoroughly with the grated oranges; squeeze in the orange juice and mix well; strain through cheese-cloth and add simple syrup enough to make a gallon, then add 2 ounces citric acid. Lemon syrup may be made in the same way, using however, 8 to 10 lemons.

Magic Mint

Lemon juice	1 pint
Essence peppermint ..	½ dram
Fruit acid	½ ounce
Simple syrup	1 gallon

Mix.

Maltese Orange Syrup

This syrup is made from the maltese orange fruit. It is very sweet and fragrant, but is more expensive than any other orange flavor. Take one quart of maltese orange juice, three quarts of rock candy syrup and two ounces citric acid solution. Serve phosphate style.

Mandarin

Syrup mandarin orange, 1 gallon; soluble essence of mandarin, 3 ounces; solution of citric acid, 2 ounces; liquid saffron, ¼ ounce; liquid cochineal, ¼ ounce. Liquid saffron is made by macerating 1½ ounces of saffron in 1 pint hot distilled water for 24 hours and then filtering the solution through paper pulp.

Maple

Five pounds of maple sugar, 1 quart of water, 1 pound of glucose. Bring to a boil, color with burnt sugar and pour in a jug.

Maple

Maple sugar	3 pounds
Water	2 pints
Solution of citric acid	4 drams

Dissolve the sugar in the water by the aid of heat, strain and add the solution of citric acid. Extract of vanilla may be added if desired.

Marshmallow

Seven pints rock candy syrup, 1¼ ounces powdered gum arabic, 4 ounces orange flower water, 2 ounces fruit acid and water enough to make 1 gallon.

May Queen Fizzette

Blood orange syrup ...	3 pints
Raspberry fruit syrup	2 pints
Fine sweet catawba ...	2 pints
Rose syrup	8 ounces
Pineapple syrup	7 ounces
Fruit acid	1 ounce

Mix well together and filter. For dispensing, place 2 ounces of the syrup in a tumbler, add shaved ice, fill up with plain carbonated water, and top off with two raspberries and a piece of lemon.

Mead

Cloves	½ ounce
Nutmegs	2 drams
Coriander	2 ounces
Jamaica ginger	2 ounces
Allspice	½ ounce
Cinnamon water	4 ounces
Alcohol	4 ounces

Pulverize the spices coarsely and macerate them for 24 hours in the alcohol and cinnamon water; then transfer the whole to a percolator, and pour on dilute alcohol till 16 ounces of fluid are obtained; percolate slowly, and add to the mixture ½ ounce of genuine orange flower water. For making a mead syrup take 1 ounce of the above extract and enough rock candy to make 2 pints.

Mead a la Chaucer

Pineapple syrup, 2 ounces; soluble essence of ginger, 4 drams; essence of sarsaparilla, 15 drops; spirit of nutmeg, 1 dram; honey or malt extract, 2 ounces; syrup, enough to make ½ gallon; caramel, sufficient to color. Mix.

Metropolitan Sour

Strawberry syrup, 3 pints; lemon syrup, 8 ounces; infusion of wild cherry, fresh, 8 ounces; tartaric acid, 1¼ drams.

Dissolve the tartaric acid in the infusion and mix with the syrups. Serve without foam in a thin mineral water glass. Price—8-ounce glass, 5 cents.

Mint Cordial

Raspberry vinegar, 4 ounces; fruit acid, 1½ ounces; extract ginger ale, 1½ ounces; brandy, 1 ounce; simple syrup, 1 gallon. Mix, strain.

Serve as follows: Shaved ice, 1 tumblerful; mint cordial syrup, as above, 2 ounces; fresh mint (pressed to side of glass with spoon), 4 sprigs; carbonated water, 1 tumblerful. Stir and serve with straws.

Mint Cordial

Make a syrup of ½ ounce ginger essence, ½ dram tincture capsicum, 1 ounce grape juice, 3 drams solution of citric acid, 1 ounce raspberry vinegar, enough syrup to make 32 ounces. Use 2 ounces of this syrup in 12-ounce glass, add fresh mint sprigs, press latter against side of glass to get flavor, fill glass two-thirds full of shaved ice, fill with coarse stream, top with mint, serve straws.

Mint Nectar

Make a syrup of 1½ ounces peppermint essence, 4 drams vanilla extract, 1 ounce solution citric acid, ½ gallon syrup, sufficient water and soda foam, and enough tincture of grass to impart a green tint. Mix the essence with 2 ounces of water and filter through powdered magnesium carbonate, passing enough water through to make 3 ounces of filtrate. Add the remaining ingredients. Serve solid in 8-ounce glass.

Mintola

Make a syrup of 4 ounces lemon juice; 4 drams peppermint essence, 1 dram solution of citric acid, enough syrup to make 32 fl. ounces, and sufficient gum foam. Dispense solid.

Mintorange

Orange stock syrup, 1 pint; green mint stock syrup, 1 pint; simple syrup, 2 quarts; juice of 6 lemons. Serve from punch bowl in 8-ounce glasses.

Morning Dew

Make a syrup of 4 drams brandy, 1 dram sweet catawba wine, 1 dram clove essence, 1 dram blood orange extract, 2 drams rose essence, 1 ounce strawberry juice, 1 ounce pineapple juice, simple syrup enough to make one-half gallon. Price—8-ounce glass, 5 cents.

Mountain Pink

Vanilla extract	½ ounce
Lemon essence	½ ounce
Pineapple juice	2 ounces
Sugar	2½ pounds
Sodium bicarbonate	60 grains

Mix well and then add

Sweet cream	2 pints
Vegetable coloring (red)	sufficient

The sodium bicarbonate to neutralize fruit acid. Serve as an ice cream soda.

Nectar

Make a syrup from 3 ounces pineapple syrup, 3 ounces strawberry syrup, 2 ounces raspberry syrup, 2½ ounces orange flower water, ½ ounce citric acid, 8 ounces sherry, 3 pints syrup. By this formula may be prepared a syrup which will make a delicious egg drink.

Nectar

Pineapple syrup, 1-3 gallon; strawberry syrup, 1-3 gallon; lemon syrup. 1-3 gallon; oil bitter almond, 6 drops; color deep red and add 1 ounce soda foam.

Nectar

One-half gallon of simple syrup, 1 quart of strawberry syrup, 1 quart of vanilla syrup, ¼ pint of port wine, 2 ounces soda foam, 1 ounce of burnt sugar.

Nectar Punch

Lemon syrup	1 pint
Strawberry syrup	1 pint
Orange syrup	1 pint
Solution phosphates	½ ounce
Orange, sliced	1

Put into a punch bowl, ladle 1½ ounces into a mineral water glass, add shaved ice, fill the glass with carbonated water, coarse stream, top off with maraschino cherries, and serve with a straw.

New Orleans Mead

This beverage, an old stand-by of a quarter of a century ago, is still a favorite in many localities. It may be made as follows:

Tonka beans	2 ounces
Cloves	7 ounces
Cinnamon	7 ounces
Ginger	7 ounces
Nutmeg	7 ounces
Mace	2 ounces
Simple syrup	20 gallons

Bruise the spices in a mortar, placing those containing the most oil in a bag by themselves and the others in another bag. Immerse all in the syrup, and boil for 12 hours, no longer. Then take 2 pounds of sassafras bark, add 3 gallons of water, and boil slowly until reduced to 2 gallons; 8 ounces of allspice may be added to advantage. After the spices are sufficiently boiled, add the decoction of sassafras and 2 gallons of honey. Put 5 quarts of the syrup thus made into a suitable fountain, add enough water to make 10 gallons, and charge to 100 pounds pressure.

Nipponese

Cherry juice (fresh) ..	1 pint
Essence bitter almonds	1 dram
Citric acid	1 dram
Simple syrup	2 quarts

Served either solid or with ice cream.

Opera Bouquet

Rose water	3 fl. ounces
Strawberry juice or concentrated syrup	8 fl. ounces
Syrup enough to make	32 fl ounces
Solution of carmine ..	q. s.

Orange

Eight large thick-skin oranges, 2 ounces fruit acid. Take oranges unpeeled and chop with meat chopper into pieces about one-quarter inch thick. Add 10 pounds of sugar and allow to sit overnight if possible so as to give the sugar a chance to draw. Add 1 gallon of water and strain through cheese-cloth. Rub together thoroughly while straining until you can see a thick yellow juice coming from the skins. This last point is very important. This is a much quicker process than the old way of grating the oranges and produces better results.

Orange

Grate six orange skins, then mix with a little sugar, in order to break up the oil cells. Squeeze the oranges into the gratings and add enough simple syrup to make one gallon. Put the mixture in the ice box until the next day, then strain well through a cheese cloth. Only good oranges should be used, the rough skinned variety are the best, purchased at a cost of, say, five cents apiece.

Orange Blossom

Blood orange syrup....	3 quarts
Orange flower water ..	4 ounces

Mix well.

Orange Chocolate

Extract of vanilla, 1 ounce; orange flower water, 2 ounces; chocolate syrup, 1 gallon.

Serve with cream in a soda glass. If all milk and egg are used in dispensing charge 15 cents, otherwise five cents for a 12-ounce glass.

Orange (crushed fresh fruit)

Oranges	8
Sugar (gran.)	5 pounds
Citric acid	1 ounce
Simple syrup	5 pints
Water	2 pints

Peel oranges carefully and cut into small cubes, removing seeds and putting in cheese cloth bag. Squeeze out juice and add pulp, sugar and water. Heat gently to help melting of sugar, and when cool add syrup and acid, mixing well.

Orgeat

Almond extract	½ dram
Orange peel essence ...	4 drams
Sugar (granulated) ..	8 ounces
Sweet cream	6 ounces
Simple syrup	3 quarts

Dissolve sugar in cream by heating, then add other ingredients, mix well, strain, and cool. This syrup should be used at once as it does not keep well.

Orgeat

One gallon simple syrup, 1 ounce of bitter almond extract, 2 ounces of soda foam, 1 ounce of caramel. This formula for orgeat syrup is commended, but the dispenser may prefer green to caramel color.

Orgeat

Almond paste	2 pounds
Blanched bitter almonds	2 ounces
Water	1 quart
Orange flower water ..	1 gill
Vanilla extract	1 ounce
Sugar (powdered) ...	4 pounds

Mix and pound into a paste with the water, then pressing the mixture in a towel to extract milk. Add other ingredients and bottle securely after sugar has dissolved. Must be kept cold to prevent fermentation.

Orgeat

Take 2 pounds of almond paste; add 2 ounces of blanched almonds, pounded fine, and mix and pound the whole with 1 quart of water, 4 ounces of orange flower water, 1 ounce of vanilla extract; then press the mixture through a towel or napkin so as to get the milk of almonds all out of it; add 4 pounds of powdered sugar to the mixture dissolved in the milk, and put in a large bottle placing it on ice to keep the syrup from fermenting. This is a good formula but the syrup must be used quickly.

Our New Mead

Tincture of Jamaica ginger, 4 fluiddrams; lemon essence, 4 fluiddrams; oil of cloves, 3 drops; honey, 4 fluidounces; simple syrup, enough to make 32 fluidounces. Color with caramel. Charge 5 cents for an 8-ounce glass.

Peach Shrub

Peel 10 pounds of peaches and mash them, and simmer gently in two quarts of the best cider vinegar, to which have been added two quarts of water, and a muslin bag containing three sticks of cinnamon and two ounces of whole cloves. Strain through coarse muslin. Add five pounds of sugar and boil 20 minutes. Bottle while still hot, first sterilizing the bottles by boiling in water for 20 minutes. Serve with carbonated water. The remaining peach pulp may be sweetened and used as a marmalade, adding a little citric acid solution, if needed to bring up the flavor. Use pint snap top bottle. Peach shrub makes a nice sundae flavor or dressing.

Pear

One gallon of simple syrup, 2 ounces of soda foam, 3 ounces of pear extract, ½ ounce of citric acid solution. Color yellow.

Phantom

Vanilla syrup	8 ounces
Pineapple syrup	1 pint
Orange syrup	24 ounces
Orange flower water ..	2 ounces

Mix well. To serve add milk or sweet cream to 13-ounce glass. This syrup makes a good egg drink flavor using all milk and charging 15 cents.

PHOSPHATE SYRUPS

Bitter Orange

Ess. of orange peel ..	½ ounce
Angostura bitters	½ ounce
Phosphate sol.	½ ounce
Orange syrup	2 quarts

Price—8-ounce glass, 5 cents.

Blood Orange

Extract of orange (fresh), 2 ounces; raspberry juice, 2 ounces; solution of citric acid (1 :2), 2 ounces; simple syrup, 1¼ gallons; tincture of cudbear, N. F., q. s. to color. Place 1 ounce in a mineral water glass, add a dash of solution of phosphate and fill with carbonated water.

Bowler's Punch

Three ounces wild grape juice (ordinary juice will do), 16 ounces strawberry syrup; ½ ounce fluid extract of kola; ½ ounce solution of acid phosphate; enough syrup to make a gallon and sufficient soda foam. Use 2 ounces to a glass, and fill with carbonated water. Charge 5 cents for 8 ounces.

Celery Phosphate

Celery Extract	2 ounces
Syrup	1 gallon

Acid phosphate—A few shakes per tumbler.

Cherry-Cola

Coca Cola syrup	1 pint
Cherry syrup	2 pints

Serve as phosphate. Price—8 ounces, 5 cents.

Cherry Special

Cherry phosphate syrup	1 quart
Plain syrup	3 quarts

Draw 1½ ounces in a mineral glass, add a dash of phosphate, draw soda into another glass, and pour into glass containing the syrup. Stick a Maraschino cherry on a wooden toothpick and drop into the glass. The customer enjoys the drink, and finishes by eating the cherry off the end of the toothpick, and goes away pleased. Price—8 ounces, 5 cents.

Chocolate Lactart

Lactart	12 ounces
Chocolate syrup ...	6 pints
Vanilla syrup	1 pint
Cinnamon syrup ...	¼ pint

For stock syrup. Dispense 1½ ounces with 1 ounce of cream and 8 or 10 ounces of carbonated water.

Delhi Punch

Grape juice	6 ounces
Orange juice	4 ounces
Phos. sol.	2 ounces
Cochineal color	½ dram
Simple syrup	2 quarts

Serve as a phosphate.

Egg Mint

Two fresh eggs; orange juice, 3 ounces; raspberry syrup, 12 ounces; phosphoric acid, syrupy, 30 minims; spirit of peppermint (1 :15), 30 minims. Mix. Trim with sliced orange and sprigs of fresh mint.

Shake well for some time, strain and use 2 ounces to a 12-ounce glass. Serve with fine ice on which crush the mint. Stir up with fine stream. When 2/3 full with the coarse stream, finish with the fine. Price—10 cents; extra egg to each glass, 15 cents.

Egyptian

Grape juice	6 ounces
Orange juice	2 ounces
Raspberry juice	2 ounces
Phosphate solution .	3 ounces
Foam extract	1 ounce
Cochineal coloring .	½ dram
Simple syrup	2 quarts

Mix thoroughly. This syrup is a good one to use in phosphates and egg drinks.

Ginger Bouquet

Sol. ess. of ginger...	2½ ounces
Citric acid	½ ounce
Extract of vanilla ..	1 ounce
Ess. of sarsaparilla	1 ounce
Syrup, to make	4 pints
Burnt sugar	1 dram

Serve solid. Price—8 ounces, 5 cents.

Goodner's Mint Phosphate

Fresh mint leaves, 1 handful. Scald in hot water; add ½ pound granulated sugar and rub in mortar; when cool strain through cheese cloth into 1 gallon plain syrup; add 4 drops oil lemon; 1 ounce fruit acid; color green. Price—8 ounces, 5 cents.

Grape Cup

One pint grape juice, 1 ounce English breakfast tea (concentrated), 4 ounces prepared lime juice, ½ ounce solution acid phosphate, 1 pint water. Add a lump of ice and let stand until cold. Fill glass ¾ full and fill with carbonated water as it is served.

Harvest Home

Tea syrup	1 pint
Maple syrup	½ pint
Acid phosphate sol. .	½ ounce
Foam extract	½ ounce
Simple syrup	3 pints

Mix and color green with a solution made from spinach leaves or any vegetable green color.

Indian Phosphate

Make a syrup of ½ ounce ginger essence, ½ dram wine flavor, 1 ounce glycerin, 2 ounces solution acid phosphate, enough syrup to make ½ gallon and sufficient foam. Draw 1½ ounces in an 8-ounce glass, filling with shaved ice and carbonated water. Add cherry, and serve solid with straws.

Lactart

Orange syrup, 10 ounces; pineapple syrup, 10 ounces; vanilla syrup, 10 ounces; lactart, 6 ounces. Mix.

Lemon Lactic

Lemon syrup	1 quart
Lactic acid	½ ounce
Fruit acid	¼ ounce
Curcuma coloring ...	30 drops
Simple syrup	1 quart

Price—8 ounces, 5 cents. Serve solid.

[illegible] Phosphate

Solution of acid phosphate, 2 fluid ounces; lemon syrup, sufficient to make 1 gallon. Mix.

N. A. R. D. Favorite

Red orange syrup	5½ pints
Orange wine	1 pint
Pineapple syrup	1 pint
Sol. of acid phos.	½ pint

Put two ounces in thin 8-ounce glass and fill with carbonated water coarse stream. Charge 5 cents.

Orange Phosphate

Solution of acid phosphate, 2 fluid ounces; orange syrup sufficient to make 1 gallon; mix. Blood orange phosphate syrup may be prepared in the same manner by using blood orange syrup. Price—8 ounces, 5 cents.

Palm Beach Queen

Blood orange syrup...	6 ounces
Raspberry syrup	4 ounces
Grape juice	4 ounces
Rose syrup	1 ounce
Pineapple syrup	1 ounce
Acid solution	1 dram

Mix. Place 2 ounces in a glass partly filled with ice, fill up with carbonated water and dress with two raspberries and a piece of pineapple. Price—10 ounces, 10 cents.

Parisian Blend

Compound tincture cardamom, 2 ounces; simple syrup, 1 gallon. Mix well, then add lactart, 1 ounce, and strain.

Pineapple Phosphate

Solution acid phosphate, 2 fluid ounces; orange syrup, 16 fluid ounces; vanilla syrup, 8 fluid ounces; pineapple syrup, sufficient to make 1 gallon; mix.

The elimination of the orange and vanilla syrups in this formula might give the pineapple syrup more of a chance to be brought out.

President's Phosphate

Blood orange juice, 8 ounces; red raspberry juice, 4 ounces; vanilla extract, 2 drams; claret, 4 ounces; juice of 3 oranges; solution of acid phosphate, 3 ounces; simple syrup, enough to make 1 gallon. To serve, place 2 ounces in an 8-ounce glass, and fill with carbonated water, coarse stream.

Rapid Transit

Tea syrup, 1 pint; vanilla syrup, 8 ounces; solution acid phosphate, ½ ounce; foam extract, ½ ounce; simple syrup, 3 pints. Color with caramel.

Raspberry Phosphate

Solution of acid phosphate, 2 fluid ounces; raspberry syrup, sufficient to make 1 gallon; mix. A bit of certified color might be added to this syrup to advantage.

Senior

Strawberry syrup ..	6 fl. ounces
Pineapple syrup ...	6 fl. ounces
Cherry syrup	6 fl. ounces
Sol. acid phosphate	1 fl. ounce

Serve 1½ fluid ounces in an 8-ounce glass and fill with carbonated water.

Spring Fruit

This phosphate may be announced by the following "ad.":

> SPRING FRUIT PHOSPHATE
>
> 5 Cents and 10 Cents
>
> DRAWN FROM THE ICE

Pineapple fruit	1 pint
Strawberry fruit	1 pint
Oranges, in slice	6
Lemons, in slice	6
Simple syrup	1 gallon
Phosphate	6 ounces

Mix well and place in a large bowl on the counter in plain view of your customers. Keep the bowl covered with glass. To serve, fill one-quarter of the glass with cracked ice and to within an inch of the top with soda. Completely fill glass with one or two dippers of the above mixture. Mix well with a spoon, top with a cherry and serve with straws.

The Allies (phosphate)

Strawberry syrup
Pineapple syrup
Cherry syrup
Pear syrup

Take of each of the above ingredients 8 fluid ounces and of dilute phosphoric acid 1 fluid ounce.

Tutti 'Frutti Egg Phosphate

First make a syrup according to the following: Lemon syrup, 1 pint; orange syrup, ½ pint; vanilla syrup, ½ pint; grape juice, 4 ounces; solution of acid phosphate, 2 ounces. Mix in the syrup 16 fresh eggs, using an egg beater. For dispensing, place 1½ ounces of the syrup in a 12-ounce glass, add some ice shavings, fill with carbonated water and stir vigorously with a spoon. It might be well to eliminate the eggs from the above formula and to add an egg with each service. Customers paying for eggs nowadays want to see the real egg.

Wild Cherry Cooler

Make syrup of 9 ounces wild cherry syrup, 4 ounces sherbet syrup, 2 drams elixir calisaya, 2 drams solution acid phosphate, 1½ ounces port wine, 2 ounces water. Price—8 ounces, 5 cents.

Wild Cherry Phosphate

Solution of acid phosphate, 2 ounces; German black cherry juice, 8 fluid ounces; syrup of wild cherry, U. S. P., 16 fluid ounces; oil of bitter almond, 10 drops; syrup, sufficient to make 1 gallon; mix.

Price—8 ounces, 5 cents.

Wild Cherry Phosphate

Oil of bitter almond, 8 drops; water, 4 ounces; mix thoroughly and add fluid extract of wild cherry, soluble, 1 ounce; extract of vanilla, 1 ounce; dilute solution of acid phosphate, 1½ ounces; syrup of red raspberry, concentrated, 8 ounces; certified red color, ½ ounce; syrup, enough to make 1 gallon. Price—8 ounces, 5 cents.

Wild Cherry Phosphate

Cherry juice, 4 fluid ounces; syrup of wild cherry, U. S. P., 3 fluid ounces; dilute phosphoric acid, 1 fluid ounce; oil of bitter almond, 2 minims; simple syrup, 8 fluid ounces, and ½ ounce pure food color.

Wild Strawberry Phosphate

Strawberry syrup ...	6 pints
Lemon syrup	1 pint
Wild cherry syrup ..	1 pint
Tartaric acid	2½ drams

Dissolve acid in wild cherry and add in order lemon and strawberry syrups.

Serve solid.—H. B. Dunham in *American Druggist*.

A first class drink. Advertise it in season.

Pineapple

The best pineapples for ices are the dark, orange-colored variety; indeed, much better than the Sugar Loaf, which is better adapted for preserving whole, while the Bird's Eye and others are more juicy and of better flavor. Pare and cut them into slices, cut out the core, which is hard and of very little flavor, grind or pound the pulp in a stone mortar and after straining use it right away, as most of the fruit will darken or change color. One quart of the juice thus made should be mixed with 3 quarts of water and made into a syrup with sugar, using 12 to 14 pounds of sugar. Heat to boiling, cool and cover.

Pineapale

Pineapple juice	4 ounces
Essence ginger sol. ...	4 ounces
Citric acid	½ ounce
Simple syrup	3 pints

A good phosphate syrup. Charge 5 cents for an 8-ounce glass.

Pink Punch

Pineapple syrup ...	1 pint
Strawberry syrup ...	½ pint
Raspberry syrup	½ pint
Sherry wine	2 ounces
Citric acid	20 grains
Red vegetable coloring	sufficient.

Plum

Three quarts of simple syrup, 1 quart of plum juice, 1 ounce of citric acid solution.

Pomegranate

First make grenadine essence, as follows:

Oil of sweet orange ...	3 parts
Oil of clove	1 part
Tincture of vanilla ...	15 parts
Tincture of ginger	10 parts
Maraschino liqueur ...	150 parts
Tincture of cochineal .	165 parts
Distilled water	150 parts
Dilute phosphoric acid	46 parts
Alcohol, 95 per cent. ..	810 parts

Mix and dissolve

To make the syrup, add 1 part of the essence to 50 parts of simple syrup, and dissolve in the mixture 1 part of citric acid. The dispenser may find it more satisfactory to buy his essence.

Preservation of Syrups

The preservation of syrups is purely a pharmaceutical operation. They must be made right, in order to keep right. Syrups, particularly fruit syrups, must be kept aseptic, especially when made without heat.

The containers should be of glass, porcelain, or of pure block tin, so that sterilization may be effected with promptness and facility. No syrup should ever be filled into a container without the container being first sterilized with scalding water. The fruit acids in the presence of sugar serve as media for the growth and development of germ life upon exposure to the air, hence the employment of pasteurization and sterilization in the preserving of fruits, etc.

A pure fruit syrup filled into a glass bottle, porcelain jar or block-tin can which has been rendered sterile with boiling water and kept at a cool temperature, will keep for any reasonable length of time. Care should be taken not to break the bottle by pouring boiling water into it.

Preserving Fruit Juices

A practical method is to fill the freshly prepared cold juice into bottles until it reaches the necks, and on top of this fruit juice a little glycerin is placed. Juices thus preserved will keep in unchanged condition in any season. Probably one of the best methods of preserving fruit juices is to add 15 per cent. of 95 per cent. alcohol. On such an addition, albumen and mucilaginous matter will be deposited. The juices may then be stored in large bottles, jars or barrels, if securely closed, and when so clear that further clarification is unnecessary, they may be decanted or siphoned off. An efficient way of clarifying fruit juices is to heat them with a small quantity of albumen (white of egg) in an enameled vessel provided with a close-fitting lid, without stirring, to near the boiling point of water. The impurities under this treatment coagulate, and either rise to the surface of the juices or fall to the bottom; the juices should then be filtered through felt or flannel. This heating process most effectively destroys the germs of fermentation and the subsequent filtration clarifies the juices, which should be kept in a cool place; so stored they will remain unchanged for an indefinite period if they have been properly and carefully prepared. Corks should be coated with wax, and, if possible, the bottle necks dipped. Great care should be observed in heating the juices, no more being applied than is absolutely necessary, or the delicate aroma will suffer.

Pugilists' Panacea

Champagne syrup, pineapple syrup, grape juice, of each 1 pint; lime juice, 4 ounces; soda foam, ½ ounce; syrup, 1 quart.

Mix and color red with tincture of cudbear, N. F. This syrup is a good one for use in phosphates.

Queen Nectar Syrup

Milk or light cream ..	32 ounces
Granulated sugar	48 ounces
Extract vanilla	6 ounces
Extract lemon	1 ounce

Dissolve sugar in milk, add vanilla extract, then the lemon. Color dark red.

Raspberry

One quart concentrated raspberry, 3 quarts simple syrup, 1 ounce citric acid and coloring. For use with milk or cream soda, omit the acid.

Raspberry and Honey

Equal parts of maple syrup, honey and raspberry juice.

Serve solid in 8-ounce glass, using 2 ounces of above syrup for the flavor, and fill glass with carbonated water.

Raspberry and Honey

Equal parts of maple syrup, honey and raspberry juice.

Serve solid in 8-ounce glass, using 2 ounces of above syrup for the flavor, and fill glass with carbonated water.

Raspberry Sharp

Fill a two-quart glass or jar with fresh red raspberries; pour over them cider vinegar until the jar is full. Screw on the cover and allow the mixture to stand for a week, then scald, pour in a jelly bag and drain off the juice. To every pint of juice add one pound of sugar. Boil fast 20 minutes and skim off any scum that arises. While hot put in bottles. One spoonful in a glass of cold carbonated water makes a drink of delicious flavor.

Red Currant

Extract of red currant, 1 ounce; red fruit coloring, 1 ounce; simple syrup, 1 gallon. Mix thoroughly, then add solution of fruit acid, 2 ounces, and strain. Serve solid; no milk.

Rhubarb

Carefully clean and scrape a dozen stalks of rhubarb, then boil them in 2 quarts of water for 15 minutes. Strain through cloth, add sufficient extract of lemon to flavor and 2 fluid drams of fruit acid. Let stand for a few hours to clarify and decant into a vessel containing 4 ounces of sugar. Serve in sherbet glasses with shaved ice. Said to be a delicious drink for the spring and early summer months.

Root Beer

Root beer extract, 5 ounces; simple syrup, 1 gallon; fruit acid, 2 ounces; soda foam, ½ ounce. Put 2 ounces in a 12-ounce stone mug and draw in the usual way.

To charge for fountain use: Place in a suitable fountain 1½ gallons of above syrup, omitting the soda foam, and water enough to make 10 gallons, and charge with gas to a pressure of 100 pounds. To be drawn from the apparatus in the manner of soda water, but without syrup. The beverage can be dispensed more readily by use of a beer pitcher (made to draw from the bottom), from which the tumbler is partially filled with the solid beverage, and the remainder drawn directly into the tumbler. This pitcher should always be kept on ice.

Root Beer

One gallon of simple syrup, 3 ounces of root beer extract, 2 ounces of soda foam, 1 ounce of burnt sugar. This formula might be improved by eliminating the soda foam and by using more of the root beer extract.

Rose

Extract of rose, 1 dram; extract of orris; ½ ounce; extract of vanilla, ¼ ounce; red fruit coloring, ¼ ounce; simple syrup, 1 quart. Mix and strain.

Rosebud

Four ounces strawberry juice, 1 ounce rose water, 29 ounces syrup, certified color to make reddish tint. To serve, put 2 ounces syrup in soda glass with 2 ounces sweet milk and fill with carbonated water. Price—5 cents for a 10-ounce glass.

Royal Fruited Champagne

Champagne syrup, 27 ounces; raspberry juice, 3 ounces; black cherry juice, 2 ounces; citric acid, ½ ounce; soluble essence of red orange, 1 fl. dram. Place 1½ ounces in a 10-ounce glass and fill with carbonated water.

Royal Muscadine

Raspberry syrup	1 pint
Grape juice syrup	1 pint
Raspberry vinegar	2 ounces

Mix. Pour two ounces into a mineral water glass, fill with carbonated water and serve. This syrup is a good one for use in a phosphate.

Sarsaparilla

Boil down sassafras bark with water to an extract of considerable degree of concentration. To a gallon of simple syrup add sufficient of this extract to make the mixture taste slightly bitter; add 4 drops of oil of wintergreen and color to a light brown with caramel. This makes a good sarsaparilla syrup, and may be dispensed either plain or with ice cream. With the addition of a few dashes of compound tincture of gentian it makes a good tonic.

Sarsaparilla

Oil of wintergreen, 10 drops; oil of sassafras, 10 drops; alcohol, ½ ounce; fluid extract of licorice, ½ ounce; caramel, ½ ounce; syrup, 5 pints. Dissolve the oils in the alcohol, add to the extract of licorice and syrup, then add caramel and shake well.

SARSAPARILLA

Compound syrup of sarsaparilla, 4 fl. ounces; simple syrup, not too heavy, ½ gallon; caramel, 1 fl. ounce; essence of wintergreen, 1 fl. dram; essence of sassafras, 1 fl. dram.

SARSAPARILLA

One and one-half ounces sarsaparilla extract in one-gallon bottle, sugar coloring, then add simple syrup enough to make 1 gallon.

SARSAPARILLA

Extract sarsaparilla, 1½ ounces; plain syrup, 1 gallon; soda foam, 1 ounce; caramel, 1½ ounces.

SARSAPARILLA (ARTIFICIAL)

"Sarsaparilla flavoring," so-called, for preparing the syrup which usually goes under the name of "sarsaparilla": Oil of wintergreen, ¾ fl. ounce; oil of sassafras, ¼ fl. ounce; oil of cassia, 1½ fl. drams; oil of cloves, 1½ fl. drams; oil of anise, 1½ fl. drams; alcohol, enough to make 8 fl. ounces.

To prepare a syrup from this add 2 fl. drams to 1 quart of simple syrup and color with caramel (about ¾ fl. ounce). To serve in a 10-ounce glass use 1½ ounces syrup.

SHAMROCK

Essence of bitter almond, 10 minims; grape juice, 4 ounces; extract of vanilla, 2 drams; compound tincture of cardamom, 2 drams; sweet cider, 10 ounces; white sugar, 14 ounces; soda foam, 3 drams.

Mix. Place 2 ounces in 10-ounce glass and fill with carbonated water.

SHERBET

Pineapple syrup	1 pint
Orange syrup	1 pint
Vanilla syrup	1 pint
Sherry wine	4 ounces

Color red or pink.

SHERBET

One quart claret wine, 1 quart strawberry, 1 quart raspberry, 1 quart pineapple, 1 ounce foam, 1 ounce solution of citric acid to make 1 gallon sherbet. This beverage is said to be very popular in Rhode Island.

SILURIAN

Rose water	10 ounces
Pineapple juice	1 pint
Fruit acid	½ ounce
Simple syrup	4 pints

Mix.

SIMPLE SYRUP

If possible use sugar free from ultramarine color, such as druggists' granulated sugar—all refiners make it.

SIMPLE SYRUP

Thirty pounds of sugar, 2½ gallons of water. Bring to a boil, and pour out at once into a crock; strain before using.

SIMPLE SYRUP (COLD PROCESS)

Granulated sugar	12 pounds
Water	1 gallon

This will produce almost two gallons simple syrup.

Put the sugar in a stone crock, pour on the water, and agitate with a wooden paddle until the sugar is entirely dissolved.

SIRUP DES QUATRE FRUITS

Sirup des Quatre Fruits or "Four Fruits," is the name given by the French to equal parts of the syrups of cherry, strawberry, raspberry, and currant.

SLOAN'S NECTAR

Extract of vanilla, 2 drams; orange flower water, 2 ounces; rock candy syrup, 1 gallon. Mix, using sufficient carmine solution to color. This is an old time formula and makes a delicious syrup for an egg drink.

SPICE OF LIFE

Red currant syrup ...	3 quarts
Lemon syrup	1 quart
Raspberry syrup	1 quart

Mix well and serve in 8-ounce glasses with cracked ice.

This formula provides for an excellent beverage to be featured as the dispenser's own "Thirst Quencher."

SPICED CHOCOLATE

Powdered cocoa ...	6 ounces
Powdered cinnamon	½ ounce
Vanilla bean, cut fine	1 dram
Water	30 ounces
Alcohol	2½ pints
Simple syrup	4 pints

Place the first three ingredients in a suitable vessel, add the water and alcohol and macerate eight days with an occasional agitation, then express, adding the simple syrup to the product thus obtained. Used as a flavoring.

SPRING CUP

Con'd. orange syrup .	1 dram
Con'd. lemon syrup ..	1 dram
Extract of vanilla	1 dram
Pineapple juice	2 drams
Grape juice	2 ounces
Strawberry juice	2 ounces
Sol. of citric acid	2 ounces
Syrup	4 pints

STRAWBERRY AND RASPBERRY

In selecting strawberries the opinions differ a great deal as to which berry to use. While some prefer a large berry, others again say that the small berries contain more juice and flavor. From our own experience, dark red, medium sized, pointed-on-the-top berries gave the most satisfaction for color as well as for flavor and juice, while the extra large berries are more for the eye and well adapted for dessert or fruit stand. Mash the berries with a wooden masher; never use iron or copper, as these metals will discolor the fruit; then mix with the sugar, and bottle or use immediately. As the strawberry has not much acid it is best to add a little lemon juice, which will heighten the flavor and color as well. For raspberries follow the same rules. Use the dark berries, pick and mash them, and finish as quickly as possible; never let any juice stand overnight unless you have some sugar mixed with it, and then keep in a porcelain-lined bowl in the refrigerator.

STRAWBERRY PUFF

Sugar	2 pounds
Cream	1 pint
Water	1 pint
Strawberry juice	4 ounces

Mix, bring to a boil, cool, then add a few drops of vanilla extract. Pour into a punch bowl and cover partly with very stiff whipped cream. Drop a few strawberries on the cream. Serve 2 ounces of the syrup in a soda glass, using the fine stream. Top off with whipped cream and a strawberry. Price—10-ounce glass, 10 cents.

SWEETS FOR THE SWEET

Strawberry syrup, 10 ounces; vanilla syrup, 10 ounces; raspberry syrup, 8 ounces; pineapple syrup, 8 ounces.

Mix thoroughly and serve 2 ounces in a 12-ounce glass, add 1 or 2 ounces of sweet cream and nearly fill the glass with carbonated water, topping off with fine stream. This is a good all-around syrup for a fancy milk shake.

TANSY ROOT BEER

Extract of root beer, 6 ounces; essence of tansy (1 in 10), 1 dram; tincture of quillaja, 1 ounce; syrup enough to make 1 gallon. Color with caramel. The tansy imparts a delicious musky flavor that has a peculiar charm for many people. Use about 1½ ounces of this syrup to each glass and fill with carbonated water.

TEA

Green tea	4 ounces
Black tea	4 ounces
Liquid foam	1 ounce
Granulated sugar	6 pounds
Boiling water, a sufficient quantity	

Place the tea in a suitable vessel, pour upon it 3 pints of boiling water, cover up tightly, macerate until cool, express and set aside. Repeat the operation twice, using the same tea and quantity of boiling water each time. Then mix the three expressed liquids and evaporate to 4 pints. In this solution dissolve sugar at boiling point, strain, and when cool add the liquid foam.

TEA

Orange Pekoe tea (true)4 ounces

Bring to a fast boil 2 pints of water, pour over tea, let stand 8 minutes, using a porcelain or aluminum kettle—never a tinned- or agate-iron one. Strain through several folds of cheese cloth, and add 4 pints heavy rock candy syrup and ½ ounce fruit acid. Will keep when well cooled. Tea syrup is recommended for iced tea, but should not be used for hot tea.

THREE-IN-ONE

Raspberry syrup	1 pint
Wild cherry syrup	1 pint
Nectar syrup	1 pint
Simple syrup	1 pint

Equal parts of each well mixed. Three-in-One makes a good milk shake flavor.

TONIC SYRUPS

A. B. C.

Syrupy ext. of malt ..	2 ounces
Syrup of vanilla	4 ounces
Syrup of almond	4 ounces
Simple syrup, heavy ..	6 ounces

Mix. To one ounce of this syrup in an 8-ounce glass add a teaspoonful of solution of acid phosphates, nearly fill the glass with carbonated water, coarse stream, stir with a spoon and serve solid. Charge 5 cents. (John Gilpin.)

ASPEPSIN

Pepsin (pure crystals), 1 dram; liquid phosphate, 2 drams; vanilla syrup, 2 pints; raspberry syrup, 6 pints. Mix and strain; serve in mineral water tumbler. Charge 5 cents.

BEEF, WINE AND IRON

Beef, wine and iron....	8 ounces
Vanilla syrup	24 ounces

Mix well.

BLAIR'S NERVE TONIC

Comp. syrup sar'p'illa	1 pint
Syrup of ginger	8 ounces
Comp. tinct. of gentian	8 ounces
Rock candy syrup ..	1½ pints
Sol. of acid phos. ..	½ pint
Caramel	q. s.

Dispense 1½ ounces to an 8-ounce glass. Mix well with carbonated water and serve quickly.

BRACER PHOSPHATE

Glycerite of pepsin, N.F.	8 ounces
Syrup of wild cherry .	8 ounces
Syrup of vanilla	8 ounces
Grape juice	3 pints
Sol. acid phosphates ..	8 ounces
Simple syrup	4 pints

This formula is especially recommended. Charge 5 cents for an 8-ounce glass.

CELERTONE

Celery extract	2 ounces
Fruit acid	3 ounces
Syrup	1 gallon

CELERY MALT TONIC

Malt extract, 8 ounces; tincture of celery seed, 2 drams; orange syrup, 4 ounces; comp. tincture of gentian, 1 dram; lemon syrup, to make 2 pints. Mix and serve 1 ounce in an 8-ounce mineral glass, with or without solution of acid phosphate.

CRABAPPLE TONIC

Sweet cider	1 gallon
Granulated sugar	7 pounds
Malt extract	4 fl. ounces
Sol. citric acid ..	1½ fl. ounces

Evaporate the cider to ½ gallon and in it dissolve the sugar, strain, and add the extract of malt and solution of citric acid. This beverage may be served "solid" with carbonated water in an 8-ounce glass.

FRIGIDINE

Make a syrup of 1 ounce citric acid; 4 drams lemon essence; 4 drams compound tincture gentian; ½ gallon syrup. Color with ½ ounce caramel. Do not serve with ice cream, or make the drink too sweet.

HERCULINE

Extract orange, 2 ounces; extract vanilla, 2 ounces; solution of phosphate, 2 ounces; tasteless tincture of iron, 4 ounces; simple syrup, 7½ pints; sugar coloring, 30 drops. Mix and strain.

HOT SCOTCH

Prepare a syrup as follows: Soluble extract of ginger, 4 ounces; soluble extract of capsicum, ¼ ounce; fluid extract of gentian, 1 dram; compound spirit of orange, 4 fl. drams; syrup of lemon, 20 ounces; caramel, sufficient. Mix thoroughly. To dispense, take 1 ounce of this syrup, place in cup, and fill with hot water.

ORANGE CORDIAL

Scale pepsin, 20 grains; curacoa cordial, 3 fl. ounces; syrupy phosphoric acid, 4 fl. drams; orange syrup, 13 fl. ounces. Trim with grated nutmeg. Charge 5 cents per service.

ORANGE FERRONE

Orange syrup (from fruit), 2 pints; raspberry syrup, 1 pint; vanilla syrup, ½ pint; elixir of iron phosphate, 6 ounces; elixir of gentian, N. F., 8 ounces. Mix. Serve plain. Dispense 2 ounces in a mineral water glass and fill with carbonated water.

OXFORD CORDIAL

Sixteen ounces calisaya syrup, 1 quart claret phosphate, 3 quarts rock candy syrup. Mix and serve in mineral glass with crushed ice. A splendid tonic for the fount. Price—eight ounces, 5 cents.

PEPSIN PHOSPHATE

Solution of pepsin, N. F., 8 ounces; raspberry syrup, 16 ounces; solution of acid phosphates, 4 ounces; syrup, enough to make 4 pints. Lime juice, orange, grape and other phosphates are made in the same manner.

REX

Orange syrup, 8 ounces; pineapple syrup, 4 ounces; strawberry syrup, 4 ounces; solution of acid phosphate, ½ ounce; fruit acid, 1 ounce; alcohol, to preserve, 3 ounces Mix and add to 1 gallon of simple syrup.

SPARTACUS

Essence of pepsin ...	15 minims
Phosphoric acid syrupy..	30 minims
Fresh eggs	½ dozen
Essence peppermint .	1 dram
Raspberry syrup	12 ounces

Place 2 ounces in a glass, fill with carbonated water and top off with grated nutmeg. Charge 10 cents.

TEXAS TONIC

Calisaya	
Angostura bitters, of each	1 ounce
Maple syrup	
Simple syrup, of each...	1 quart
Caramel color	1 dram

WONDER WORKER

Lemon syrup	
Orange syrup	
Moxie syrup, of each..	½ pint
Spirits of juniper ..	1 ounce
Simple syrup	2 quarts

VANILLA

Vanilla syrup is prepared by adding vanilla extract to syrup, the proportions depending upon the strength of the extract, which in turn depends upon the quality of the vanilla used, the method of extraction and care in manipulation. Enough of the extract should be added to the syrup to insure the requisite degree of flavor to the resulting product. Generally, 1½ to two ounces of extract to a 12-pound syrup is sufficient. The addition of two ounces of good sherry wine will give a vanilla syrup which will be a "winner."

VERMONT MAPLE SPECIAL

Dissolve 5 cakes of maple syrup in 1 gallon of water, cool and strain. To the syrup thus made add an equal quantity of simple syrup and, if desired, flavor with extract of vanilla. Dispense two ounces in glass with cream and a little nutmeg, and sufficient carbonated water to fill.

WALNUT OR HICKORY

Take 1 pound of hickory nut or walnut kernels and remove the skin by blanching, which, if left on, would give an unpleasant, bitter taste; then powder in a Wedgewood or porcelain mortar, adding a few drops of lemon juice to prevent the separation of oil in the kernel and sufficient water, gradually added, to make a thick emulsion. As fast as the kernels are reduced put them in a linen cloth, which should be gathered around them so that they may be squeezed through the cloth. Whatever is left in the cloth should be returned to the mortar and pulverized further, the lemon juice and water being added as needed. All should eventually pass through the strainer. The result of this process (about 2 pints) is to be added to 2 quarts of cream syrup. This formula may be varied, and perhaps improved, by a slight addition of extract of lemon or vanilla, or any other flavor to suit the taste; likewise a little coloring to suit the fancy.

WILD PLUM

Plum juice	8 ounces
Plum jelly	8 ounces
Sugar	3 pounds
Water	3 pints

Dissolve the jelly and sugar in the juice and water mixture by heating and add when cool

Ess. bitter almonds	½ dram
Citric acid	4 ounces
Sol. tartaric acid ...	6 drams
Grape juice	8 ounces

Color deep purple and serve very cold.

WILD ROSE

Triple rosewater	2 ounces
Strawberry juice	8 ounces
Soda foam	2 ounces
Tincture of cochineal..	q. s.

Syrup to make 1 pint.

WILD STRAWBERRY

Strawberry syrup, 16 ounces; almond essence, 2 drams; cherry juice, 8 ounces; diluted phosphoric acid, 1 ounce; syrup, enough to make 32 ounces.

YUM YUM

Vanilla syrup	4 ounces
Orgeat syrup	4 ounces
Pineapple syrup	4 ounces
Orange flower water .	1 ounce
Syrup to make	1 quart

EXTRACTS

CHOCOLATE

Curacao cocoa	400 parts
Vanilla beans, cut	1 part

Macerate for 14 days with alcohol, 55 per cent., 2,000 parts. After straining and pressing, the alcoholic extract is set aside and the residue percolated with hot water so as to obtain 575 parts of percolate, which are then mixed with the alcoholic liquid. If a sweetened preparation is required, sugar, 1,000 parts, is dissolved with heat in the aqueous liquid before mixing it with the reserved portion.

COFFEE

Ground coffee	½ pound
Boiling water	1 quart

Percolate three or four times. The lower end of the percolator should be carefully introduced into the receiver and protected to preserve the aroma.

Hop Ale

Fresh hops	4 ounces
Quassia (coarse pow.)	2 ounces
Alcohol	6 ounces
Water	sufficient

Mix the hops and quassia, pour on 12 fluid ounces of boiling water, set aside for several hours, agitating occasionally; then add the alcohol, macerate for several days, stirring from time to time, and filter, adding through the filter enough water to make the filtrate measure 16 fluid ounces.

Hyacintha

American saffron ...	½	ounce
Juniper berries......	¼	ounce
Dates	¼	ounce
Raisins	¼	ounce
Aniseed 15		grains
Cinnamon 8		grains
Coriander 8		grains
Mace 8		grains
Cloves 8		grains
Diluted alcohol 19		ounces

Reduce the solids, add the diluted alcohol, macerate for six days, agitating occasionally, and filter. Use the resultant tincture for flavoring syrup, which is then to be served solid like the phosphates.

Lemon

Fresh lemon peel......	10 pounds
Rectified spirit (60%).	1 gallon

Macerate for 28 days, with occasional stirring, press, and add:

Terpeneless oil of lemon 2 drams

Shake well, allow to stand seven days, draw off the clear tincture, and filter the rest. The author parenthetically states that "more or less terpeneless oil of lemon may be added according to the desired cost," and also, that "a full year's supply of this preparation should be made each year in January when the fruit arrives in its best condition."

Mead Extract

Cloves	½	ounce
Nutmeg	2	drams
Coriander	2	ounces
Jamaica ginger	2	ounces
Allspice	½	ounce
Cinnamon water ...	4	ounces
Alcohol	4	ounces

Pulverize the spices coarsely and macerate them for 24 hours in the alcohol and cinnamon water, then transfer to a percolator and pour diluted alcohol until 16 ounces of the fluid are obtained. Percolate slowly and to the mixture add half ounce of orange flower water. For dispensing at the fountain take 1 ounce of the above compound and 2 pints of plain syrup.

Tango Extract

Tincture avena sativa....	3½	ounces
Tincture cinchona comp.	2½	ounces
Tincture nux vomica....	1	ounce
Fluid ext. of cocoa......	1	ounce
Angostura bitters	5	ounces
Oil of wintergreen......	1	dram
Oil of sassafras	1	dram
Caramel coloring 24		ounces

This is the old Moxocolo extract closely similar to the well known Moxie.

SODA FOAMS

Soda Foam

Ground quillaja bark 8	ounces
Boiling water.......	½ gallon

Soda Foam

Let stand for 24 hours and filter.

Sarsaparilla bark, finely ground	8 ounces
Quillaja bark................	8 ounces
Diluted alcohol to obtain.....	4 pints

Prepare by percolation. Of this 1 to 2 ounces is sufficient to a gallon of syrup and will produce an excellent foam. Tincture of quillaja, N.F., or fluid extract of quillaja may be used for the same purpose, the former in the proportion of 1 ounce in 2 gallons of syrup, or 1 ounce of the fluid extract in 8 or 10 gallons of syrup. It is not likely that either of these preparations could be employed as "gum foam," although we believe there can be no objection to lawful use under their proper names.

Soda Foam

Take of gum arabic 8 ounces, and water 1 pint; wash the gum with water, to free it from impurities, and add the water, stirring occasionally until dissolved. It should be used in the proportion of 3 or 4 ounces to the gallon of syrup.

Soda Foam

Wash an ounce of Irish moss to free it from impurities, add 1 pint of water and boil for 5 minutes; or heat in a water bath for 15 minutes, or macerate in cold water for 24 hours, with occasional stirring; filter through purified cotton on a muslin strainer, in a hot water funnel. It can be used with soda syrup, in the proportion of from 2 to 4 ounces to 1 gallon of syrup.

(2) Fruit Mixed Drinks

Within this classification come a host of ades, punches, and similar fruit drinks that are widely popular, especially during the summer time. Many of the drinks in this class antedate the soda fountain for centuries—lemonade, so the story goes, was brought back to Europe from the East by the Crusaders—while others are more modern concoctions.

The tart drinks, those with the vinous flavor of grapes, and the citrous flavor of lemons, oranges, limes, and grape fruit, are all famous as quenchers of thirst. In the following pages will be found any number of drinks that will prove to be capital sellers on the piping hot days. Many people cherish the belief that nothing "touches the spot" during the dog days quite so well as plain, cold lemonade, but the clever dispenser will find that he has in the class of the mixed fruit drinks scores that are more palatable and just as effective for the thirst as that "old reliable."

A most effective way of pushing these hot weather drinks is to select an attractive formula and then make up a big bowl of the mixture and set on the counter. If the bowl be of cut glass—or pressed glass—so much the better, but it must contain a big chunk of ice and as the ice melts it must be kept up to standard strength by the judicious addition of more of the concentrated flavoring materials. Fresh fruits, berries in season, slices of orange and pineapple, add very much to the attractiveness of such a display. The punch should be served in small punch glasses at five or ten cents according to the formula and the trade catered to, or at double the price in tall, thin glasses with straws.

Generally speaking the dispensers of the country north of the Mason and Dixon Line have neglected the mixed fruit beverages. In the South, as one would naturally expect, such drinks are well appreciated and form an important percentage of the fountain business. Almost without exception these beverages yield a handsome profit, and a fountain that wins such a trade will build up a reputation for service, besides having added a very profitable feature to its menu.

When made up as stock syrups or served from a punch bowl fruit mixed drinks offer the added attraction of being very easily and quickly served. This is much in their favor especially during the rush of the hot days when they are always most in demand. In making these stock syrups, punches, etc., it should be remembered that all such mixes are very liable to decomposition. Do not mix up more than one day's supply at a time in the summer, nor more than a couple of days' stock during the cooler months.

MIXED FRUIT DRINKS

Ades, Punches, Shrubs, etc.

Apple Julep

Squeeze half a lemon into a 12-ounce glass, add a little cracked ice, and two ounces of simple syrup. Arrange green mint leaves in the glass, in the good old Southern style, and then fill the glass with cider. Sprinkle a little grated nutmeg on the surface, and collect 10 or 15 cents, according to the price of cider. Fresh made cider is preferable as an ingredient in this feature. A good fall special at 10c.

Frosted Apple Jack

Take 6 sour green apples, stick into them 36 cloves and then half bake. In a glass or porcelain dish put 36 allspice, one lemon sliced thin, and the apples while hot and cover all with sugar. Let the mixture stand twelve hours, add 1 quart of syrup and stew until the apples, except the cores, fall to pieces. Take off the fire before the mixture separates, let cool, add thin slices of lemon and over all put two bananas. Add ¼ teaspoonful of powdered cinnamon, 2 teaspoonfuls of extract of Jamaica ginger, 4 teaspoonfuls of extract of vanilla and enough syrup to make a half gallon. Serve 2 tablespoonfuls to each glass with a similar quantity of cream or ice cream, and fill the glass with carbonated water, small stream. See that each glass has a slice of lemon and banana in it. Price—10 ounces, 15 cents. (Thurman Wilcox.)

Cherry Cocktail

Pineapple syrup	½ ounce
Cherry syrup	½ ounce
Lemon syrup	½ ounce
Angostura bitters	2 ounces
Carbonated water	2 ounces

Strain into cocktail glass and serve with cherry. Charge 10 cents.

Cherry Fizz

Cherry syrup	1½ ounces
Lemon	½ ounce

Squeeze juice of ½ lemon in cherry syrup in mixing glass half full of carbonated water. Strain into 12-ounce glass, add little sodium bicarbonate from end of spoon and fill glass with fine stream. Price—10 ounces, 10 cents.

Cherry Julep

Half fill 12-ounce glass with shaved ice, 1½ ounces red cherry syrup, 1 dash sherry wine and a sprig of fresh mint crushed with the ice. Add carbonated water to fill glass. Serve with straws and decorate with creme de menthe cherries. Charge 10 cents.

Cherry Punch

Into a tall glass put some shaved ice, add 2 ounces of cherry syrup, a little lime juice, a spoonful of crushed pineapple, and shake; then fill up the glass with carbonated water and top with a slice of orange and slices of strawberries. Serve with straws. Price—10 ounces, 10 cents.

Fascination

Cherry syrup	2	ounces
Cracked ice		½ glass
Juice of ¼ lemon		
Plain water		enough

Mix well and top with orange and cherry. Price—10 ounces, 10 cents.

Cracker Jack

Cherry syrup, 1 ounce, cracked ice to fill glass and then pour in grape juice to fill glass. Price—8 ounce glass, 10 cents.

Resolution Fizz

Cherry syrup	1½ ounces
Lemon juice	½ ounce

Pour into a mixing glass half full of cracked ice, stir well, strain into a fancy glass which has previously been filled about one-third full of fine ice, add a little sodium bicarbonate on the end of a spoon, stir well, add a slice of lemon and orange, or a cherry, and a slice of orange. Price—10 ounces, 10 cents.

Wilson Punch

Cherry syrup	½	ounce
Lemon syrup	½	ounce
Sarsaparilla syrup	1	ounce

Draw syrups in large glass, add cracked ice. Fill with carbonated water, using fine stream. Finish with a cherry and a cube of pineapple. The punch is a good special and should be priced at 10 cents for 10 ounces.

Cherry-mint Cooler

Wild cherry syrup ... 2	ounces
Creme de menthe syr.	½ ounce

Serve with fine ice in 8-ounce glass and charge five cents. The juice of a quarter lemon might be added to the cooler to advantage.

Claret Ringue

Claret syrup	1	ounce
Lemon syrup	1	ounce
Port wine	½	ounce
Sweet cream	½	ounce

Mix and serve 2 ounces in an 8-ounce glass. Charge five cents.

Old English Punch

Claret syrup	1 ounce
Pineapple syrup	1 ounce
Juice of ½ lemon.	
Plain water ice.........	½ glassful

Mix in 10-ounce glass, fill with coarse stream, mix well and serve with spoon. Charge 10 cents.

Klaret Klondike

Fill sherbet glass with fine shaved ice, pour over the ice 1 ounce claret syrup and garnish with a slice of lemon. Serve with spoon. Charge 10 cents.

Cold Clam Broth

Place 1½ ounces of good clam bouillon in an 8-ounce glass, add a little shaved ice and fill up with cold soda water, a dash of salt, a dash of phosphate, and a slice of lemon. A quick money getter. Price, 10 cents.

Crown Prince Fizz

Into a 12-ounce glass put:

Strawberry syrup	2	ounces
Orange syrup	1	ounce
Juice of half a lemon		
Shaved ice	¼	glassful

Shake, strain and fill with carbonated water. Price 10 cents for 10 ounces, and sells well in summer. (Martin S. Meyer.)

Dorian Cream

Orange syrup	¾	ounce
Maple syrup	¾	ounce
Plain cream	1	ounce
Shaved ice	⅓	glassful

Place in a suitable glass, fill with carbonated water, sprinkle powdered nutmeg on top and serve with straws and crackers. Makes a delicious drink. Charge 10 cents for a 12-ounce glass. (F. Mintzer.)

Eastertide Special

Claret syrup	1	ounce
Peachblow syrup	1	ounce
Orange cider	4	ounces
Shaved ice	¼	glass

Place in glass and fill with carbonated water, fine stream, and mix with spoon. Price 15 cents for 12-ounce glass.

Fedora

Shaved ice as usual, usual quantity of orgeat syrup, a small timball glass of kirschwasser; shake well and fill the glass with vichy and throw in one or two white French cherries for decoration. Price—10 ounces, 10 cents.

Fire Extinguisher

Blood orange syr....	1	ounce
Lemon juice	1	fluid dram
Raspberry syrup..	½	ounce
Shaved ice	½	glass

Add several ounces of carbonated water, stir well, strain into an 8-ounce glass, and fill the latter with plain soda water, coarse stream. Serve with two straws.

Fruit Frazzle

Fruit syrup	2 ounces
Powdered sugar ...	1 teaspoonful
Cracked ice	2 ounces
Carbonated water, sufficient.	

Mix syrup, sugar and ice with about 9 ounces of the water, stir, strain into glass containing slice of pineapple, peach, orange or lemon, and a few selected berries or small fruit. Price—10 ounces, 10 cents.

Fruit Punch

Make a syrup of equal parts of strawberry, pineapple and orange syrup. Use

1½ ounces of this syrup to glass third full of ice. Fill with carbonated water, coarse stream, and add a few strawberries, a slice of pineapple, a slice of orange, and serve with straws. The juice of half a lemon will bring out the fruit flavor in the punch. Price—12 ounces, 10 or 15 cents.

Fruit-Ade

Juice of ½ orange	
Juice of ½ lemon	
Pineapple juice	2 tablespoonfuls
Powdered sugar	2 tablespoonfuls
Crushed ice	½ glass

Fill glass with water; shake well and serve with straws. Price—12 ounces, 15 cents.

Fruited Freeze

Crushed fruits served in the following manner are delicious and refreshing:

Crushed fruit	1½ ounces
Juice of half a lemon	
Shaved ice, q. s.	

Put the shaved ice in a small glass, add the fruit and lemon juice, stir well, and serve with a spoon and straws. Price—8 ounces, 10 cents.

Ginger Ale Bounce

Into a 6-ounce phosphate glass put 1 ounce of grape juice; add a little cracked ice and fill the glass with ginger ale; serve with two straws. "A splendid hot weather drink, easily and quickly made." Charge 10 cents for domestic ginger ale and 15 for the imported. The Bounce does not pay at 5 cents. (Alonzo Draine.)

Ginger Ale Cobbler

Dissolve a teaspoonful of powdered sugar in a small quantity of carbonated water, add a large slice of pineapple, nearly fill the glass with shaved ice, and then add enough ginger ale to fill the glass. Decorate with fruit and serve with straws. Some dispensers use ginger ale syrup instead of ginger ale, then adding a little carbonated water to fill the glass. Price 10 cents for 10 ounces.

Ginger Ale Sour

Lemon syrup	4 drams
Lemon juice	2 drams
Ginger ale to fill an 8-ounce glass.	

Charge 10 cents for eight ounces.

Ginger Cold Snap

Ginger ale	1½ ounces
Orange syrup	½ ounce
Shaved ice	½ glass
Pineapple slice.	

Fill glass with carbonated water and stir with spoon. Charge 10 cents for 10 ounces.

Ginger Fizz

Carbonated water	4½ ounces
Ginger syrup	1½ ounces

Mix carefully with twist bar spoon then add small spoonful powdered sugar. Serve 8 ounces for 5 cents.

Ginger Fizz

About 6½ ounces carbonated water, 1½ ounces ginger syrup. Mix and add a small spoonful powdered sugar.

Ginger-Ginger

Ginger syrup	1 ounce
Lemon syrup	½ ounce
Cream syrup	½ ounce
Whipped cream	1 spoonful

Place in a 12-ounce glass half filled with carbonated water, using coarse and fine streams, and then fill with ginger ale on draught.

Gingerade

Into an eight-ounce glass pour one-half ounce of ginger syrup, of the imported variety. Add one-half ounce of simple syrup, the juice of one lemon and fill the glass with shaved ice. Top off with a slice of orange and sell for 10 cents. Can be varied by using orange juice. (Wade T. Surratt.)

Golden Mint Orangeade

Squeeze the juice of one-half an orange into a 12-ounce glass, then add one-half ounce of mint syrup and one-half ounce of plain syrup. Fill a wine glass three-fourths full of shaved ice, then fill the remainder of the glass with distilled water (ice cold). Put the mixture into a shaker and shake a minute to make it real cold, then pour back into the glass. Place two straws in the glass and top off with a sprig of mint and a Maraschino cherry. Price—12 ounces, 15 cents. Crushed fresh mint makes a good addition to this formula. (P. W. McCole.)

Good Cheer

Blood orange syrup	½ ounce
Catawba syrup	½ ounce
Pineapple syrup	½ ounce
Lemon juice	1 ounce

Place in a 12-ounce glass and serve "solid" with carbonated water. Price—10 ounces, 10 cents.

Gordon Cooler

Orange syrup	1 ounce
Cherry syrup	1 ounce
Juice of ½ lemon	
Some shaved ice	

Fill glass with carbonated water, top with slice of pineapple and a cherry; serve with straws and spoon.

Grape Ale

Take 1 ounce of any good brand grape juice, a little shaved ice, place in an 8-ounce glass and fill with ginger ale. This is a 10 cent drink.

Grape Cooler

Grape juice	1 ounce
Orange syrup	1½ ounces
Lemon syrup	½ ounce
Sol. acid phosphate	¼ teaspoonful
Cracked ice	¼ glass

Mix in 14-ounce lemonade glass. Decorate with pineapple. Price—10 ounces, 10 cents.

Royal Ruby

Grape juice	2 ounces
Strawberry syrup	1 ounce
Rose leaves 6; mint leaves, 6; crushed well against side of glass with ice	
Cracked ice	½ glassful

Stir thoroughly, then add carbonated water, coarse stream, and serve in tall lemonade glass. Decorate with creme de menthe cherries and a slice of lemon. Price—12 ounces, 15 cents.

Grape Float

Fill a 12-ounce glass to within an inch of the top with plain lemonade, then carefully float on the top a sufficient quantity of grape juice to fill the glass, being careful not to disturb the lemonade. A good, long drink, and a thirst quencher. Price—10 ounces, 10 cents.

Grape Float Lemonade

Make a plain lemonade, fill a glass within 1 inch of top, then hold a teaspoon in center of glass and pour in slowly grape juice until the glass is full. Price—12 ounces, 15 cents.

Quaker Freeze

Pure grape juice	1 ounce
Raspberry syrup	½ ounce
Orange syrup	½ ounce
Juice of ½ orange	
Fine ice shavings	½ glassful

Fill glass with carbonated water; mix with a spoon. Decorate with fresh mint and seasonable fruits; serve with straws. Price—12 ounces, 15 cents.

Grape-Lemo

One ounce lemon syrup, 1 ounce grape juice in mineral glass, fill up with carbonated water, stir well and serve.

Grape Gurgle

Into a suitable glass place one No. 10 ladleful of ice cream, 1 ounce of grape syrup and enough chipped ice; mix thoroughly, strain into a 12-ounce glass and fill with carbonated water (fine stream). Sprinkle with powdered nutmeg cr cinnamon.

Grape Orange Cooler

Lemon syrup	1 ounce
Grape juice	1 ounce
Orange water ice	1 scoopful

Dispense in 12 ounce glass. Shake and fill the glass with carbonated water. Decorate with a slice of lemon and orange and serve. Price—10 ounces, 10 cents.

Presidential Favorite

Grape juice	1 ounce
Lemon juice	¼ ounce
Orange juice	¼ ounce
Powdered sugar	2 drams

Place all in a glass, half filled with cracked ice, adding enough ice-cold plain water to finish. Shake, serve in a 12-ounce lemonade glass and trim with a slice of orange and a cherry. Charge 10 cents.

Grape Syllabub

Grape juice	2 ounces
Simple syrup	1 ounce
Lukewarm cream	2 ounces

Mix the grape juice and syrup, adding the cream slowly so as to froth. Ten ounces, ten cents.

Oriental Magi

Draw into a 12-ounce glass 1 ounce of strawberry syrup and 2 ounces of unfermented grape juice and fill the glass two-thirds full of shaved ice; break into the mixture a few sprigs of mint, shake thoroughly, fill with carbonated water, mix with a spoon, and decorate with fruit, etc. Rose syrup may be substituted for strawberry syrup or the syrups may be used in equal quantities. Price—10 ounces, 10 cents.

Grape Trickle

Place in a 12-ounce glass partly filled with cracked, not shaved, ice, ½ ounce of lemon syrup, ½ ounce of pineapple syrup, ½ ounce of orange syrup, and a little more than ½ ounce of grape juice. Fill the glass with carbonated water and stir until all is thoroughly mixed. Can also be dispensed as a float, adding the grape juice last. The author states that this formula makes a very refreshing drink and can be readily sold for 10 cents at a good profit. To advertise the beverage he has used with good results a placard bearing the phrase: "Grape Trickle for that Thirsty Spot." (J. M. Bingaman.)

Gunther's Excelsior

German cherry juice	1 ounce
Rhine wine	1 ounce
Lemon juice	1 dash
Simple syrup	1 ounce

Draw into 12-ounce glass, fill with carbonated water, garnish with cherries and pineapple and serve with straws. Can be made acceptably with American cherry juice. Price—10 ounces, 10 cents.

Happy Punch

Raspberry vinegar syrup	1 ounce
Orange cider	2 ounces
Bitters	3 dashes

Half fill glass with ice. Complete with coarse stream.

Helena Freezer

Vanilla syrup	1½ ounces
Orange pulp	1 tablespoonful
Shaved ice	¼ glassful

Place all in a 12-ounce soda glass, fill with carbonated water, fine stream, and top off with whipped cream.

Hokie Pokie Cooler

Simple syrup	1 ounce
Pure cream	½ ounce
Extract nectar	1 dash
Carbonated water, fine	¾ glass
Shaved ice to fill glass.	

Serve with whipped cream and spoon. Price—8 ounces, 10 cents.

Irish Iceberg

Fill a champagne glass half full of finely shaved ice, then pour in creme de menthe syrup and decorate with creme de menthe cherries on toothpicks. Cut straw in two, put the pieces in the glass and serve. The Iceberg makes a good St. Patrick's Day special. Charge 10 cents.

Jove's Own Drink

Into a 12-ounce glass draw ½ ounce of pistachio syrup, ½ ounce Catawba syrup and nearly fill with shaved ice. Fill glass with carbonated water, fine stream, and top off with a creme de menthe cherry. Price—12 ounces, 10 cents.

Kola Cooler

Kola punch	½ ounce
Red cherry syrup	½ ounce
Pineapple syrup	½ ounce

Serve in 12-ounce glass two-thirds full cracked ice, and carbonated water. Straws.

Ladies Punch

Into a glass partly filled with shaved ice draw three-fourths ounce of pineapple syrup, 1 teaspoonful of lemon juice, and a teaspoonful of raspberry vinegar. Place a mixing spoon in the glass and almost fill the glass with carbonated water, coarse stream. Add a little more shaved ice, on the top of which place crushed strawberries. Between the glass and the ice insert a slice of orange. Serve with spoon and straws. Price—10 cents for 10 ounces.

Lemonade (wholesale)

Water	3 gallons
Lemons (juice)	4 dozen
Citric acid	3½ ounces
Granulated sugar	20 pounds

Mix and stir adding the paste made from 4 ounces of granulated sugar and the grated rind of 4 lemons. This formula is recommended.

Plain Lemonade

With many individuals the old-fashioned lemonade is still a great favorite. To make it at the fountain counter place 2 tablespoonfuls of powdered sugar in a 12-ounce glass one-half full of crushed ice. Now cut a lemon in two, slice each section in two or three pieces, add the juice of the lemon and fill the glass with plain ice-cold water. Shake thoroughly, pour from shaker into glass, and serve with straws. It should be observed that some patrons object to a too great abundance of ice.

Fancy Lemonade

Make a lemonade in the regular manner and pour in a teaspoonful of raspberry or strawberry syrup, which will go to the bottom of the glass. Now carefully pour on the top the same amount of grape juice without stirring. A piece of pineapple, orange or other fruit may be added to decorate the drink. The drink may also be made with the glass half full of shaved ice and the fruit on top. Serve with straws. Charge 15 or 20 cents for a 12-ounce glass.

Seltzer Lemonade

Juice of 1 lemon	
Powdered sugar	1 tablespoonful
Seltzer water	4 ounces
Shaved ice	2 ounces

Stir vigorously in a shaker with a spoon, strain into a 12-ounce glass, fill the glass with seltzer water and stir with a spoon.

Lemon-Raspberry-Ade

Put into a large soda tumbler 1 tablespoonful of raspberry syrup, 1 tablespoonful of lemon squash and a lump of ice; nearly fill the glass with carbonated water and ornament with a thin slice of lemon and a few red and white raspberries. Drink through straws.

American Citizen Lemonade

Orange syrup	1 ounce
Lemon syrup	1 ounce
Powdered sugar	1 teaspoonful
Solution acid phosphate	1 dash
Shaved ice	1-3 glass

Add slice of orange and run two straws through it. A better flavor and more "life" may be brought to this 'ade by using the fruit juices.

Tropical Lemonade

Juice of 1 lemon.	
Pineapple syrup	1½ ounces

Place in a 12-ounce glass, fill glass with carbonated water, coarse stream, add a slice of pineapple and a ladleful of crushed pineapple, and serve with spoon and straws. Price—10 or 12 ounces, 15 cents.

Broadway Lemonade

Juice of 1 lemon	
Powdered sugar	2 tablespoons
Grape juice	½ ounce
Claret wine	½ ounce
Small scoop shaved ice	

Fill glass with plain water, shake, put in 12-ounce lemonade glass; finish with a slice of orange and a cherry; serve with spoon and straws.

Grape Lemonade

Make a soda lemonade, filling the glass to within about an inch of the top. Mix and decorate with lemon and orange slices. pour on top enough to fill the glass with the desired grape juice, and serve without mixing, with straws. Price—12 ounces, 15 or 20 cents.

Vino-Lemo

Into a 10-ounce glass put 2 ounces shaved ice, the juice of 1 lemon, and 2 ounces claret syrup. Shake well, nearly fill the glass with carbonated water, stir, strain, add one slice of lemon and enough carbonated water to fill the glass; serve with two straws. Charge 10 cents.

Grape Lemonade

Grape syrup	½ ounce
Lemon syrup	½ ounce
Carbonated water, large stream	7 ounces
Solution acid phosphate	a dash

Stir gently with spoon.

Saratoga Cooler

Juice of ½ lemon	
Sugar	1 teaspoonful
Water	1 ounce
Shaved ice	½ glass

Fill 12-ounce glass with ginger ale. Price—10 ounces, 10 cents.

Indian Lemonade

Wash well 2 dozen lemons, dry, pare thinly and squeeze the juice over the shaved rinds. Let stand for 12 hours, then add 2 glasses of grape jelly; dissolve 4 cupfuls of sugar in 3 quarts of scalded milk and add it to the fruit juice. When cold strain through double cheesecloth without squeezing and serve with chopped ice. Better results may be obtained with this formula by grating the lemonpeels.

Kitro Lemonade

Kitro syrup	½ ounce
Juice of 1 lemon	
Powdered sugar	1 tablespoonful
Shaved ice.	

Fill up with plain water and serve in 12-ounce lemonade glass. Decorate with cherries.

Queen Lemonade

Juice of ½ lemon	
Orange syrup	1½ ounces
Grape juice	2 ounces
Cracked ice, enough.	
Carbonated water to fill glass.	

Shake and serve in a tall glass, without straining. Top off with a slice each of orange and pineapple.

Southern Lemonade

Take a good size watermelon, hollow out the inside, first cutting a small slice from the narrow end to act as a lid or cover, place on the counter and surround with shaved or cracked ice; then fill with lemonade, adding enough extract of Jamaica ginger to suit the taste. When serving to the customer, fill a glass one-fourth full of shaved ice, add one or two pieces of the melon taken from the inside, then fill the glass with lemonade and serve with straws and napkins. Price—12 ounces, 10 or 15 cents. A big "hit" on "Fair Day" or "Old Home Week." (F. Mintzer.)

Ruby Smash

Cracked ice	½	glass
Juice of ½ lemon		
Cherry malt phosphate syrup	2	ounces
Lactart	2	dashes

Shake well, then fill with carbonated water and serve with two straws. Price—8 ounces, 5 cents.

Old Fashioned Limeade

Squeeze the juice of 1 lime into a 12-ounce glass, put in one-half the rind, add 1 ounce of lemon syrup and 2 tablespoonfuls of powdered sugar, fill glass two-thirds full of crushed ice and draw on carbonated water, coarse stream, until the glass is nearly full. Mix by pouring from glass to strainer several times; finally strain into the glass and serve with straws. Price—12 ounces, 10 cents.

Wild Limeade

Lime juice	½	ounce
Or juice of half lime		
Strawberry juice ...	½	ounce
Powdered sugar....	2	spoonfuls
Wintergreen essence..	2	dashes

Shake with cracked ice, strain and add carbonated water. Price—10 ounces, 5 cents.

Lime and Ginger

Ginger syrup	1	ounce
Lime juice syrup...	1	ounce

Use mineral water glass and draw full of carbonated water, coarse stream, and stir with spoon. The juice of half fresh lime may be used in this formula. Price—8 ounces, 5 cents.

Lime Cooler

Express the juice of the large ripe lime into a 12-ounce glass and add one ounce of plain syrup and one-half ounce of pineapple syrup. Fill the glass one-half full of snow ice and add carbonated water, coarse stream; top off with pineapple aces and Maraschino cherries, at the same time adding a teaspoonful of cherry juice. Then float on a round slice of orange of the same diameter as the top of the glass and insert two straws.

This drink is a trade winner, more especially with men and boys. It can be served at ten cents, but 15 cents is a better price. Only good fresh limes should be used in its preparation. (J. E. Bradley.)

Maid Marion

Into a 12-ounce glass two-thirds full of shaved ice draw half ounce of pineapple juice, and 1 dram each of lemon juice and raspberry vinegar. Fill glass nearly full with carbonated water (coarse stream) and garnish with a strawberry and a slice of fresh orange. Serve with spoon and straws. Price—10 ounces, 10 cents.

Man Friday

One measure of ice cream (16 to-the-quart); two-thirds glass of carbonated water; 1½ ounces coca-cola syrup; ¼ ounce wild cherry syrup. Put ice cream and carbonated water in a 10-ounce glass, stir with spoon until the cream is melted and has a nice foam; then add the syrups and fill with fine stream, which will give a dark drink with a white foam. Charge 10 cents.

Marathon Refresher

Into a 12-ounce glass place three-fourths ounce each of strawberry, raspberry and orange syrups, juice of one-half lemon, and one-half glass shaved ice. Fill glass with carbonated water, coarse stream, mix with spoon, decorate with fruit in season, and serve with straws. Charge 10 cents.

May Bird

Blood orange syrup..	½	fluid ounce
Catawba syrup	½	fluid ounce
Pineapple syrup	½	fluid ounce
Lemon juice	1	fluid dram

Serve solid in an 8-ounce glass with carbonated water. Charge 5 cents.

Menthe-ade

Powdered sugar.......	2	teaspoonfuls
Creme de menthe syrup	¼	ounce
Roman punch syrup..	1	ounce

Dispense above ingredients in a mineral water glass one-fourth full of crushed ice. Draw full of carbonated water, coarse stream, and serve with straws. Price—10 ounces, 10 cents.

Mint Cooler

Crush or mash some fresh green mint leaves with a little coarse or granulated sugar; add some shaved ice, a small quantity of milk or almond syrup or sweet cream, flavored with almond; shake well and fill up the glass with Apollinaris. Price, when served in an 8-ounce glass with plain soda, 5 cents; with Apollinaris, 10 cents.

Mint Freeze

Chop fine several sprigs of mint and put them in a mixing glass; add 2 ounces crushed ice, ½ ounce of black raspberry syrup; ½ ounce of claret syrup; ½ ounce of ginger syrup; the juice of half a lemon, and 1 ounce of grape juice. Fill the glass with carbonated water and stir; strain into a 12-ounce glass one-half full of crushed ice and trim with a slice of pineapple, one cherry and a sprig of mint. Charge 10 or 15 cents.—(E. V. Kayner.)

Frozen Mint

Pour into a small sundae glass nearly filled with shaved ice 1 ounce of creme de menthe syrup; top off with creme de menthe cherries and a sprig of mint. Or, serve in 8-ounce glass with plain carbonated water. Charge 5 cents.

Trio Grande

Creme de menthe syrup	1	ounce
Orange syrup	½	ounce
Tame cherry syrup....	½	ounce

Dispense in a tall 12-ounce glass, filled one-quarter with shaved ice, and fill with carbonated water, coarse stream. Top off with orange, mint leaves and a Maraschino cherry. Serve with two straws. Price, 15 cents.—(Henry O. Peters.)

Menthe Fresher

Crush fresh mint leaves with small amount of granulated sugar; add 4 ounces shaved ice; 2 ounces almond cream syrup and 4 ounces plain water. Shake, strain and fill with Apollinaris. Price—10 ounces, 10 cents.

Mexican Mint Glace

Into a fancy 8-ounce glass put a heaping ladleful of shaved ice, and ½ ounce cherry syrup; then add a No. 16-to-the-quart dipperful of vanilla ice cream, and another ladleful of shaved ice; now add ½ ounce of mint syrup, and top off with a cherry. Can be sold profitably at 10 cents per glass. The name is suggested by the fact that the beverage duplicates the colors of the Mexican flag. It is recommended for use as a special.

Kentucky Cooler

Fill a 10 ounce glass with crushed ice and four sprigs of fresh mint; then with a mallet bruise the mint until the pungent juice mingles with the ice. Next add blood orange syrup and fill with soda. Then put on the finishing touches—sprig of mint, slice of pineapple and Maraschino cherry. Price—10 ounces, 10 cents.—(Willis Wood.)

Louisville Cooler

Fill glass half-full with shaved ice, add a teaspoonful of sugar, a dash of lemon juice and two or three sprigs of fresh mint. Crush the mint against the sides of the glass to get the flavor; then add ½ ounce of claret syrup, 1½ ounces of raspberry syrup and nearly fill the glass with carbonated water. Insert a bunch of mint and fill the glass with carbonated water. Serve with straws and decorate with fruits of the season.

Mont Blanc

Strawberry syrup ...	1	ounce
Orange syrup	½	ounce
Vanilla syrup	½	ounce
Grape juice	½	ounce
Shaved ice	¼	glassful

Mix the first three ingredients in a 12-ounce glass, fill glass with carbonated water, add the ice, top with the grape juice and float the whipped cream over all. Charge 15 cents.

Nectar Plush

A very pretty feature; beat up 2 ounces of nectar syrup with 2 ounces of ice cream, add 2 dashes of Maraschino and sherry wine, and enough carbonated water (fine stream) to fill 12-ounce glass. Top off with whipped cream and nutmeg. Serve with straws and spoon.

Orange-ade (from fresh fruit)

Juice of 1 orange.		
Powdered sugar ...	1	tablespoonful
Lemon juice	3	dashes
Fine ice	½	glass

Fill glass with plain water and shake well. Dress with fruits. Price—10 ounces, 10 cents. Use Florida orange.

Orangeade (fancy)

Juice of 1 orange		
Juice of ½ a lime		
Orange syrup	½	ounce
Powdered sugar....	1	tablespoonful

Mix; shake all well with plain water and quite a bit of shaved ice. Garnish with a creme de menthe cherry (a Maraschino cherry will do) and a slice of orange. Price—12 ounces, 15 cents. Use Florida orange, size 150.

Spanish Blood Orange-ade

Juice of 1 orange		
Raspberry syrup ..	½	ounce
Lemon juice	1	dram
Sugar	1	tablespoonful
Shaved ice	½	glassful

About half fill the glass with the coarse stream, stir, strain into a mineral water glass and fill with carbonated water. Price—10 ounces, 10 cents.

Trio-ade

Juice of 1 orange		
Grape juice	½	ounce
Raspberry syrup	½	ounce
Lemon juice	1	teaspoonful

Mix; add a tablespoonful of sugar and ½ glassful shaved ice. Half fill the glass with carbonated water, coarse stream, stir, strain into a mineral water glass and fill with fine stream.

Orange Cress

In a 12-ounce lemonade glass squeeze the juice of half a lemon and half an orange, add a dash of cherry juice and 1½ ounces of simple syrup. Fill the glass about two-thirds full of cracked or shaved ice and fill with plain water. Turn all over in a shaker and mix well. Put in two straws and decorate with a red cherry and a couple of sprigs of water-cress.

This is a long, cooling drink, and customers once trying it come back for more. As the season advances it will be found among the best sellers and thirst quenchers. Cress being an edible plant makes a perfect decoration for lemonades and other fancy drinks, such as freezes, etc. Price—10 or 15 cents, the latter being the fairer price.—(H. R. Rowe.)

Punchine

Cracked ice	2	ounces
Juice of ½ orange		
Lemon juice	1	dash
Curacoa cordial	1	dash
Claret syrup	1	ounce
Catawba syrup	1	ounce

Fill glass with carbonated water, stir, strain and serve. Price—10 cents for 10 ounces.

Elks' Delight

Juice of half an orange		
Juice of half a lemon		
Pure grape juice.....	1	ounce
Powdered sugar	2	teaspoonfuls

Cracked ice to half fill glass, carbonated water to finish; shake, serve in 12-ounce lemonade glass. Garnish with a slice of orange and a cherry. Charge 15 cents.

Personal Regards

Orange syrup	2	ounces
Raspberry juice ...	1	ounce
Orange juice	½	ounce

Place in a 12-ounce glass one-fourth full of shaved ice. Shake well, fill with carbonated water, coarse stream, mix with a spoon, add a slice of orange or a small quantity of crushed pineapple and serve with two straws. Price—12 ounces, 10 cents.

Creamed Orange

Vanilla syrup.....	1½	ounces
Shaved ice	1	tablespoonful
Orange pulp	1½	tablespoonfuls
Pure cream	1	ounce

Fill with carbonated water, fine stream. Price—12 ounces, 10 cents. This feature has also been recommended as a flavor for ice cream soda.

Oriental Nectar

Sherbet syrup	1	ounce
Red orange syrup...	½	ounce

Fill a mineral glass half full of crushed ice, finish with carbonated water and serve with straws. Price—8-ounce glass, 5 cents.

Pineapple Freeze

Pineapple syrup	1	ounce
Powdered sugar	1	teaspoonful
Shaved ice	½	glassful

Add some carbonated water, stir vigorously in a shaker, strain into an 8-ounce glass, fill the latter with the coarse stream of carbonated water, stir again, and add a piece of pineapple or some crushed pineapple.

Tommy Atkins

Crushed pineapple ..	2	spoonfuls
Pineapple syrup	½	ounce
Shaved ice.		

Serve in punch glasses. For an 8-ounce bell top with whipped cream, or two ice cream soda spoonfuls of vanilla in cream, and charge 10 cents.

Sherbet Float

Two ounces pineapple syrup, one ounce sweet cream. Fill glass two-thirds full of carbonated water and float a ball of sherbet on top. Use pineapple or orange sherbet. Price—10 ounces, 10 cents. (Harry G. Frame.)

Pineapple Cream Punch

Grated pineapple syrup..	½	ounce
Crushed strawberry syrup	½	ounce
Nectar syrup	1	ounce
Ice cream	1	spoonful

Add a little shaved ice, fill with orange cider and stir. Price—10 ounces, 10 cents.

Pineapple Freeze

One ounce pineapple syrup, half glass shaved ice. Draw into 12-ounce glass, fill with carbonated water, stir, add spoonful crushed strawberry; top with slice of orange; serve with straws; or, draw ounce of syrup into 8-ounce glass; add large spoonful of either canned or fresh grated pineapple; fill with shaved ice, stir, serve with spoon.

Pineapple Punch

Pineapple syrup	2	ounces
Blood orange syrup.	1	ounce
Shaved ice		sufficient

Serve solid in 12-ounce glass garnished with slice of fresh fruit. Charge 10 cents.

Pineapple Punch

Pineapple syrup	2	ounces
Claret syrup	½	ounce
Finely shaved ice..	1-3	glass
Crushed pineapple....	3	teaspoonfuls

Fill in 12-ounce glass with coarse stream of carbonated water and serve with a spoon and straws. Price—10 ounces, 5 cents.

Pineapple Smash

Pineapple syrup ...	1	ounce
Powdered sugar ...	1	teaspoonful
Shaved ice	½	glass

Add carbonated water, shake, strain into 8-ounce glass and fill with coarse stream; stir again and add a piece of pineapple or some crushed pineapple. Add a small amount of lemon juice. Price—10 ounces, 10 cents.

Raspberry Punch

Raspberry syrup ...	¾	ounce
Orange syrup	¾	ounce
Juice of one lime		
Grape juice	1	ounce

Draw the syrup into a 12-ounce glass, then add the lime juice and grape juice. Fill the glass one-third full of shaved ice and complete the filling with carbonated water. Mix and decorate with two cherries and two pineapple cubes on toothpicks. Price—10 ounces, 10 cents.

Raspberry Royal

Shaved ice	½	glass
Raspberry vinegar ..	½	ounce
Raspberry juice	½	ounce
Crushed raspberry fruit syrup	1	ounce

Draw solid, using sufficient carbonated water to fill; stir gently. Price—8 ounces, 5 cents.

Razzle-Dazzle

Pineapple syrup	½	ounce
Lemon juice	½	dram
Raspberry vinegar ..	1	dram
Powdered sugar	1	teaspoonful

Fill soda glass two-thirds full of fine cracked ice, put mixing spoon in glass and turn on coarse stream of carbonated water. Fill nearly to the top of the glass and stir with spoon, adding more cracked ice. Over all place a teaspoonful of crushed raspberry and insert a small piece of orange between the ice and glass. Serve in ordinary thin soda glasses with straws.

Russian Frappe

Make an infusion of tea, as for iced tea, using one level teaspoonful of tea to each pint of water. Strain and cool. In a glass place a small scoop of lemon sherbet, an ounce of lemon syrup, and a dash of phosphate solution. Add a little cracked ice, and fill with the cold tea to within one-third of the top. Finish with carbonated water. This furnishes a pleasing variation of the ordinary iced tea with lemon, and brings a better price. (H. M. Houpt.)

Spring Punch

Strawberry syrup...	½	ounce
Orange syrup	½	ounce
Pineapple syrup	½	ounce
Lemon juice	2	dashes
Shaved ice	1-3	glassful

Place ice in glass, draw on the syrups and fill with carbonated water. Trim with slice of pineapple and two strawberries. Serve with straws. Charge 10 cents for 10 ounces.

STRAWBERRY A LA WASHINGTON

Shaved ice	1-3	glass
Strawberry juice	1	dash
Strawberry syrup	2	ounces
Crushed strawberries	2	teaspoonfuls

Fill with carbonated water. Stir with spoon and add four halves of strawberries. Serve with spoon and straws. Two ounces of sweet cream added to this formula might enhance its delectability. Add cream to syrup, then add juice and fruit.

PINK PLUSH

Shaved ice	1-3	glass
Strawberry syrup	2	ounces
Orange cider	2	ounces
Sweet cream	½	ounce

Fill up with carbonated water and stir gently. Serve with straws.

STRAWBERRY LIME CORDIAL

Shaved ice	2-3	glass
Lime juice	1	ounce
Strawberry syrup	2	ounces

Fill with carbonated water, drawing solid; stir gently. Straws. Use fresh limes when possible.

STRAWBERRY-ADE

Juice of one lemon		
Strawberry juice	1	ounce
Powdered sugar	1	spoonful

Add shaved ice, shake, strain and fill solid with plain soda. Stir and serve with straws. Charge 10 cents for 12 ounces. The formula may be improved by adding more sugar.

(3) Phosphates, Bitters, and Rickeys

It has been well said that "drinks may come and drinks may go but the orange phosphate goes on forever," and although the great popularity that all these phosphate drinks enjoyed a few years ago has waned somewhat of late, still even in the face of severe competition from all sorts of beverage novelties, there are hundreds of fountains where the phosphates have kept in the lead.

The most popular members of the phosphate family are, of course, the lemon, the orange, and the egg. This last is an especially good drink to push during the hot weather when the patrons who want egg drinks do not want so heavy and heating a drink as the egg and milk shakes that have the call during the winter.

Dispensers make a mistake in always having their specials in the sundae class. The phosphates have many friends, and a reputation for the right kind of a phosphate is, especially in the business section of large cities, a great asset. The more unusual and the more elaborate phosphates make capital specialties to push and feature on certain days.

The drinks of the bitters division are practically "temperance cocktails." They can be confidently recommended as stomach tonics and appetizers. As a class they offer a too-little appreciated special for fountains that cater to men's trade.

Rickeys, containing as they all do, the juice of limes, are classed among thirst quenching beverages. What applies to the advantages of pushing the mixed fruit drinks in hot weather applies to the rickey, with the exception that the latter must be mixed as served, a proceeding which requires more time at the fountain. For this reason care should be exercised in pricing the rickeys, in order to cover both time and service, as well as the cost of the materials.

PHOSPHATES, BITTERS AND RICKEYS

ANGOSTURA

A popular drink in New York is made by adding 1 teaspoonful of angostura bitters to a regular lemon phosphate, in which a little more than the regular quantity of lemon syrup is used. Price—8 ounces, 10 cents.

ARCTIC PHOSPHATE

Strawberry syrup	½	ounce
Pineapple syrup	½	ounce
Vanilla syrup	½	ounce
Orange syrup	½	ounce
Acid phosphate	3	dashes
Cracked ice	½	glass
Carbonated water sufficient to fill 12-ounce glass.		

Stir thoroughly with a spoon. Serve with spoon and straws. Charge 5 cents for 8 ounces.

BERRY

Half an ounce each of strawberry, raspberry, checkerberry and lemon syrups. Add a dash of phosphate and fill 10-ounce glass with cold, well carbonated water.

BOSPHO

Raspberry syrup	¾	ounce
Orange syrup	¾	ounce
Lemon syrup	1	ounce
Lime syrup	¼	ounce
Solution of acid phosphates	1	dash
Cracked ice	½	glass

Mix in a 10-ounce glass and decorate with slices of orange and pineapple, and a Maraschino cherry. Serve with spoon and straws. It might be better for the soda man to keep the syrups called for blended together as a stock syrup. Use 1½ ounces of this to a 10-ounce glass. Add other ingredients and charge 10 cents.

CELERY WHITE CAP

Celery syrup	½	ounce
Orange syrup	½	ounce
Lemon syrup	½	ounce
White of 1 egg		
Acid phosphate	1	dash
Cracked ice	¼	glass

Shake, strain, toss and serve.

CENTRAL PARK

Pineapple syrup	1	ounce
Red orange syrup	1	ounce
Solution acid phosphate	6	dashes

Put into an 8-ounce soda glass in the order named and fill with carbonated water. Serve "solid." Charge 5 cents for 8 ounces.

CHERRY

One ounce of wild cherry syrup, 4 dashes of phosphate. Fill glass with carbonated water, using coarse stream; stir well with spoon.

CHERRY ROOT

Cherry syrup	1	ounce
Root beer	4	ounces
Phosphate	2	dashes

Draw syrup in 10-ounce glass and fill half full with carbonated water, fine stream, then draw in charged root beer and dash of phosphate.

CHERRY SOUR

1 lime		
Cherry syrup	1	ounce
Simple syrup	½	ounce
Acid phosphate		dash
Shaved ice	½	glass
Carbonated water		sufficient

Mix well and top with Maraschino cherry. Charge 10 cents.

CLARINE

Claret syrup	½	ounce
Catawba syrup	½	ounce
Solution acid phos.	1	dram

Serve like other phosphate drinks. For 8-ounce glass charge 5 cents.

FRATERNITY

Champagne phosphate	1½	ounces
Lime syrup	1	ounce
Lemon syrup	½	ounce
Shaved ice	¼	glass

Mix in a 14-ounce lemonade glass and decorate with pineapple or cherries.

FROST BITE

Fill an 8- or 9-ounce glass with finely shaved ice, add three dashes of solution of acid phosphate, and then cover the ice with orange syrup or syrup of any desired flavor; serve with spoon. Sells quickly in hot weather for 10 cents.

FROZEN PHOSPHATE

Make a delicious orange or other fruit phosphate, nearly filling an eight or 10-ounce glass. Float on top of liquid one ball unflavored ice. Serve with long spoon. Charge 10 cents. This drink is very cold.

FROZEN

This name is applied to a combination of unflavored water ice, solution of acid phosphate and any specified flavor. To prepare it, have the ice cream manufacturer make a batch of unflavored water ice; of this take a No. 10 dipperful and place it in a mixing glass; add 2 or 3 dashes of solution of acid phosphate and a ladleful of any specified fruit syrup (2 or 3 ounces). After stirring the mixture thoroughly, transfer it to a sundae cup, and top with a Maraschino cherry. Price 10 cents. (L. W. Garnett.)

FRUIT

Fill glass half full of fine ice; then add in the following order:

Powdered sugar	1	tablespoonful
Orange syrup	½	ounce
Lemon syrup	2	dashes
Raspberry syrup	1	dash
Solution of acid phosphates	¼	ounce

Fill the glass with soda water, stir well, strain into a mineral water glass and serve. Price—10 ounces, 5 cents.

GINGER

Fill a glass containing 2 ounces of shaved ice with ginger ale, adding a dash of Maraschino flavor and a squeeze of a lemon. Garnish with slices of orange and lemon, and serve. If bottled ginger ale is used, charge 10 cents.

HAPPY HOOLIGAN

Malaga wine	½	ounce
Raspberry syrup	1½	ounces
Solution acid phosphate	2	dashes

Draw into phosphate glass and fill with solid stream of carbonated water. This delicious phosphate can be made into a fancy 10-cent beverage by drawing into a 10-ounce glass and garnishing with slice each of orange, pineapple and cherry.

HIAWATHA

Cherry syrup	½	ounce
Orange syrup	½	ounce
Pineapple syrup	1	ounce
Phosphate	6	dashes
Cracked ice and soda.		

Fountain operators may find it advantageous to keep the above fruit syrups blended as a stock syrup.

JACK FROST

Grape syrup	½	ounce
Orange syrup	½	ounce
Carbonated water, large stream	7	ounces
Solution acid phosphate		a dash

Stir with a spoon.

JAPANESE THIRST KILLER

Orgeat syrup	1	ounce
Cracked ice	1	ounce
Solution of phosphate	2	dashes
Angostura bitters	2	dashes

Fill up with grape juice, and add a slice of pineapple. Charge 10 or 15 cents.

LIQUID AIR

Use 10-ounce phosphate glass. Fill one-third full of pineapple or lemon ice, using 1 ounce of flavor, preferably vril, wild cherry or lemon. Add a dash of phosphate, draw glass full of ice water, stir well and serve with straws. (Geo. P. Stockton.)

MANHATTAN

Lime syrup	½	ounce
Acid phosphate	1	dash
Angostura bitters	2	dashes
Grape juice	2	ounces
Sherry wine	1	dash
Powdered sugar	2	teaspoonfuls
Cracked ice	¼	glass

Add carbonated water in a coarse stream to fill 10-ounce glass. Decorate with orange and pineapple fruit. Charge 10 cents.

MARYLAND MINT

Creme de menthe syrup	½	ounce
Ginger syrup	1½	ounces
Solution acid phosphate	1	dash

Serve in 8-ounce mineral water glass, 2-3 full of cracked ice. Add sprig of fresh mint. Price—5 or 10 cents.

MEXICAN REBEL

Strawberry syrup	1	ounce
Orange syrup	1	ounce

A dash each of phosphate and tincture of capsicum. Quarter fill glass with shaved ice and fill with coarse stream. Serve with straw. Price—8 ounces, 5 cents.

MIXED MINT

Orange syrup	½	ounce
Ginger ale	½	ounce
Grape syrup	½	ounce
Pineapple syrup	½	ounce
Solution acid phosphate	2	dashes
Fresh mint leaves	4	
Shaved ice	½	glass

Press the mint to the sides of the glass, then add coarse stream to fill the glass. Stir and serve with straws. Decorate with fresh mint. Price—10 ounces, 10 cents.

NECTARINE

Fill 8-ounce glass seven-eighths full carbonated water, in coarse stream, add an ounce of nectar syrup and a dram of solution acid phosphates, and stir, serving solid.

NIPPONESE PHOSPHATE

Orange syrup	½	ounce
Ginger syrup	½	ounce
Grape syrup	½	ounce
Pineapple syrup	½	ounce
Acid phosphate	2	dashes
Shaved ice	½	tumblerful
Four fresh mint leaves.		

Press leaves against the sides of the glass to flavor, fill glass with carbonated water (coarse stream), and serve with two straws. Price—5 cents.

ORANGE

This drink is so universally dispensed that a formula for it is hardly necessary here, but it might be mentioned that a little orange syrup in a mineral-water glass, a little acid phosphate squirted into it, carbonated water from the coarse stream enough to nearly fill the glass, and cracked ice or not, as the occasion or the drinker may require, the whole well stirred with a spoon, constitutes this most popular, perhaps, of all orange drinks.

RED ORANGE

Red orange syrup	1	ounce
Solution of acid phosphates	1	teaspoonful
Plain soda	7	ounces

Mix the syrup and solution of acid phosphates and draw coarse soda stream till glass is full; stir with spoon. Serve in 8-ounce mineral water glass.

PHOSPHATE FRAPPE

Fill 8- or 9-ounce glass with finely shaved ice, add 3 dashes of solution of acid phosphate and nearly cover the ice with the desired syrup; serve with a spoon.

PINEAPPLE

Pineapple syrup	2	ounces
Solution of acid phosphate	3	dashes

Half fill a soda glass with crushed ice, pour over it the syrup and phosphate, fill with carbonated water, stir and drain into a mineral glass. Price—5 cents.

ROSE CELERY

Straight raspberry phosphate with a dash of celery.

SCORCHERS' DELIGHT

Shaved ice	½	glass
Solution acid phosphate	5	dashes
Compound tincture of cardamom	3	dashes
Vanilla syrup	1½	ounces

Add carbonated water, stir, strain and serve with straws.

SUNLIGHT

Fine ice	⅓	glassful
Powdered sugar	1	tablespoonful

Orange syrup	½	ounce
Lemon syrup	2	dashes
Prepared raspberry.		dash
Solution of acid phosphate	¼	ounce

Fill with carbonated water and stir well, strain into a mineral glass and serve.

SUNSHINE

Pineapple syrup	1	ounce
Raspberry syrup	¼	ounce
Lemon juice	1	dash
Solution of acid phosphate	2	dashes

Place in an 8-ounce glass and fill with carbonated water. Price—5 cents.

THIRST QUENCHER

Raspberry syrup	2	fluid ounces
Sol. acid phosphate	1	fluid dram
Juice of one-half lemon		
Shaved ice	2	ounces
Water	8	fluid ounces

Mix well by agitating in a shaker; strain and add enough water to fill a 12-ounce glass. Charge 10 cents.

US FELLERS

Place in a 10-ounce glass:

Orange syrup	2	ounces
Grape juice	1	ounce
Sol. acid phosphates	3	dashes
A little fine ice		

Shake, fill with carbonated water, and strain. Price—10 cents.

EGG PHOSPHATES

BOARD OF TRADE TONIC

One egg.		
Creme de menthe syrup	1	ounce
Lemon syrup	½	ounce
Pineapple syrup	1	ounce
Sol. acid phosphate	2	dashes

Add the syrups first. Shake, strain, toss and serve. Price—12 ounces, 10 cents.

BROADWAY EGG

Half fill mixing glass with shaved ice, crush 2 large sprays of mint on the ice, and add 1½ ounces blood orange syrup, 2 dashes of solution of acid phosphate, 1 egg, and shake well and strain. Add carbonated water, fine stream, toss several times, grate nutmeg on top and serve with straws. Charge 10 cents.

CENTRAL PARK EGG

Into a 12-ounce glass draw 1 ounce of blood orange syrup and 1 ounce of pineapple syrup. Into this break an egg, add a few dashes of acid phosphate and a little finely shaved ice. Shake thoroughly and fill with carbonated water, as is done in preparing all egg phosphates. Strain into a clean glass and serve. Charge 10 cents.

CHERRY EGG

Cherry syrup	1½	fluid ounces
Sol. acid phosphatés.	1	fluid dram
Shaved ice	2	ounces
1 egg		

Shake well, draw on coarse stream of carbonated water, strain into a 12-ounce glass, nearly fill the glass with the coarse stream of soda, finishing the operation with fine stream; sprinkle on a small amount of powdered nutmeg.

EGG

Into mixing glass add 1½ ounces orange syrup and 1½ ounces lemon syrup, break one egg, and add acid phosphate to customer's taste. Add shaved ice, shake well, fill with fine stream and serve in bell glass. This formula is recommended for the preparation of egg phosphate. Add one ounce plain water before shaking. Price—12 ounces, 10 cents.

EGG

Small quantity cracked ice		
Lemon syrup	1½	ounces
Egg	1	
Sol. acid phosphate	30	drops

Shake together with hand shaker and add enough plain carbonated water to fill the glass. Mix well by pouring from glass to shaker, and serve, after adding a little grated nutmeg.

FAMOSA

Raspberry syrup	1	ounce
Sweet cream	1	ounce
Essence Jamaica ginger	1	dash
Crushed ice	2	teaspoonfuls
Egg	1	

Place the egg in a glass, add syrup, cream, shaved ice and a few dashes of solution acid phosphate. Shake well and strain into glass. Draw enough carbonated water through coarse stream to fill glass. Pour from one glass to another a few times. Price—12 ounces, 10 cents.

FIZZY EGG

One egg		
Lemon syrup	½	ounce
Sol. acid phosphate	1	dash
Angostura bitters	1	dash
Shaved ice		sufficient

Shake well, pour into a mineral water glass, fill with fine stream soda water.

FLIPPED EGG

One whole egg		
Lemon syrup	1	ounce
Catawba syrup	1	ounce
Sol. acid phosphate	½	teaspoonful

Shake and fill glass with carbonated water. Mix by pouring from glass to shaker, strain into glass, add grated nutmeg and serve.

FROZEN EGG

Lemon syrup	1½	ounces
Orange syrup	1½	ounces
Phosphate	5 or 6	dashes
One egg		
Two pieces ice.		
Orange or lemon water ice	1	dipperful

Shake until very cold, use fine stream serve in 12-ounce glass with a dash of nutmeg. Price should be 15 cents. The water ice makes it very cold. (Irvin K. Scott.)

GOLD MINE

Put the yolk of two eggs in a 14-ounce glass, add two ounces of orangeade syrup, two dashes of port wine and two of acid phosphate. Then add one 16-to-the-quart dipper of vanilla ice cream and fill with cracked ice. Carbonate with the fine stream. Charge 15 cents. (E. J. Howard.)

GOODNER'S EGG

Lemon syrup	1	ounce
Orange syrup	1	ounce
Several dashes solution acid phosphate (50 per cent.)		
Port wine	2	dashes
Plain sweet cream	½	ounce
1 egg		

Dispense in a mixing glass half filled with cracked ice, shake thoroughly, add carbonated water from fine stream, pour 3 times and top with nutmeg. By too much pouring the gas will be lost and as a result the drink will be flat and heavy. Charge 10 cents.

HERCULES EGG PHOSPHATE

Wine syrup	½	ounce
Pineapple syrup	1	ounce
Juice of 1 lemon		
1 egg		
Acid phosphate	3	dashes
Shaved ice, enough		

Place all in a suitable glass, fill with carbonated water, and serve. Price—12 or 14 ounces, 15 cents.

IMPERIAL EGG

White and yolk of 1 egg		
Lemon syrup	½	ounce
Catawba syrup	1	ounce
Sol. acid phosphate	½	teaspoonful

Shake well, then add carbonated water, enough to fill glass. Mix well by pouring from tumbler to shaker, strain through julep strainer into tumbler, then add a little grated nutmeg and serve. Price—12 ounces, 10 cents.

KITRO EGG

Kitro syrup	1½	ounces
Lemon syrup	1	ounce
Acid phosphate to suit		
1 egg		

Shake above with shaved ice. Strain into mixing glass, return to shaker and add carbonated water with fine stream. Serve in 12-ounce thin glass. Add nutmeg if desired.

KNIGHT'S EGG

One egg, one ounce lemon syrup, one-half ounce red raspberry syrup, four dashes of acid phosphates, shaved ice. Shake thoroughly, then fill the mixing glass nearly full with coarse stream, then fizz. This makes a very light, foamy acid drink that should be poured back and forth two or three times in order not to have it all foam.

By leaving out the phosphate and adding four ounces of milk and two ounces ice cream, you have another delicious egg drink but *not* egg phosphate. Price—First formula, 10 cents; second formula, 15 cents. (A. G. Knights.)

MALTESE EGG

Into a 10-ounce glass put 2 ounces blood orange syrup, add one egg, a few dashes of solution of acid phosphate, and some shaved ice. Shake well, fill the shaker with carbonated water, large stream only, and strain into a thin glass.

MOONBEAM EGG PHOSPHATE

Egg (white)	1	
Lemon syrup	1	ounce
Pineapple syrup	1	ounce
Phosphate	3	dashes

Price—12 ounces, 10 cents. (F. X. Sullivan.)

PARISIAN FLIP

Formulas differ somewhat for this drink. As good as any, perhaps, is this one:

Orange syrup	1	ounce
Pineapple syrup	1	ounce
1 egg		
Sol. phosphates	1	dash
Angostura bitters	2	dashes
Shaved ice	¼	glass

Mix thoroughly by pouring from shaker to glass. Fill glass with carbonated water and strain. May be served with straws. Price—12 ounces, 10 cents.

PHROSO

Ginger syrup	1	ounce
Lemon syrup	1	ounce
Angostura bitters	1	dash
1 egg		
Sol. of acid phosphate to suit.		
Cracked ice		

Shake well together, strain, add carbonated water, fine stream, and serve with nutmeg and straw.

PISTACHE A LA CREME

1 egg		
Pistache syrup	2	ounces
Phosphate	3	dashes

Shake, strain, fill with fine stream and serve with straws. By eliminating the phosphate and making this beverage all milk (12-ounce glass) a real pistache a la creme may be obtained.

REGULATION EGG

Lemon syrup	1½	ounces
Orange syrup	1½	ounces
Phosphate	6	dashes
Egg	1	

Two pieces of ice. Shake it well. Strain and serve with nutmeg.

ROYAL EGG PHOSPHATE

Sherry syrup	1½	fluid ounces
Sol. acid phosphates.	2	fluid drams
Shaved or cracked ice	2	ounces
Egg	1	

Shake well, draw on the coarse stream of carbonated water, strain into a 12-ounce glass, again nearly fill the glass with the coarse stream of carbonated water, completing the operation with fine stream, sprinkle on a small amount of powdered nutmeg.

ROYAL GOLF

Into a suitable glass put 1 ounce syrup of raspberry, then break one egg. Next add 2 ounces of sweet cream, ¼ glassful shaved ice, and a few dashes of solution of acid phosphate. Fill the glass with carbonated water, coarse stream, and then pour all into another glass, repeating the operation, until a foaming drink is produced. Sells for 10 cents. (Bert Taylor.)

ROYAL ROYSTERER

Egg (yolk)	1	
Orange syrup	1½	ounces
Gentian bitters	1	dash

Serve as egg phosphate. Price—12 ounces, 10 cents.

SPRAGUE'S SPECIAL

Egg	1	
Pineapple syrup		
Strawberry syrup		
Sol. acid phosphate	1	dash
Angostura bitters	1	dash
Sweet cream	½	ounce

Fill glass with ice, shake, strain and add carbonated water, fine stream, then pour from glass to shaker, top with nutmeg and serve with straws. Price—12 ounces, 10 cents.

THREE-IN-ONE

One whole egg		
Malted milk	1	teaspoonful
Clam bouillon	½	ounce
Hock syrup	1	ounce
Cracked ice	¼	tumblerful

Shake well, strain and add 1 dash solution of acid phosphate, filling with carbonated water. Pour from shaker to tumbler and serve with nutmeg and straw. Charge 15 cents.

TRUE NEW YORKER

One egg		
Lemon syrup	1	ounce
Catawba syrup	1	ounce
Sol. acid phosphate	2	dashes

Shake and fill glass with carbonated water. Mix by pouring from shaker to glass and vice versa. Strain into 10-ounce glass, add nutmeg and serve. Price—12 ounces, 10 cents.

ZIZZ EGG MINT PHOSPHATE

One egg		
Syrup of orange	1	ounce
Syrup of lemon	1	ounce
Creme de menthe	1	dram
Acid phosphate	2	dashes
Milk	2	ounces
Cracked ice		sufficient

Shake, strain and add soda to fill 12-ounce glass. Dispense with straws. This concoction might be improved by shaking a little before adding the phosphate. (Robt. B. Batcheller.)

BITTERS

AROMATIC BITTERS

Angostura bitters	4	drams
Chamomile flowers	1½	drams
Cinnamon bark	½	dram
Cardamom seeds	1	dram
Bitter orange peel	1	dram
Proof spirit	1	quart

Macerate 15 days, press out and filter.

PIQUANT BITTERS

Extract of cardamom	1	ounce
Extract of vanilla	½	ounce
Extract of licorice	¼	ounce
Extract of coriander	20	minims
Oil of bitter orange	4	minims
Essence of ginger, soluble	½	ounce
Rectified spirits	1	pint
Maple syrup	1	pint
Water	1	quart

Mix oil of orange and the extracts thoroughly with spirits, add other ingredients and mix again.

WORMWOOD BITTERS

Oil of lemon	2	drops
Oil of absinthe	1	drop
Oil of caraway	1	drop
Extract of licorice	½	ounce
Extract of chamomile	¼	ounce
Rectified spirits	1	pint
Simple syrup	1	pint
Water	1	quart

Mix well.

AULD LANG SYNE

Shaved ice	½	glass
Angostura bitters	4	dashes
Elixir of calisaya	2	dashes
Curacoa cordial	4	dashes
Compound tincture of gentian	2	dashes
Cherry malt phosphate syrup	1	ounce

Shake well and add enough carbonated water to fill 8-ounce glass. Serve in mineral water glass. This appetizer might be made up as a stock syrup and dispensed 1½ ounces to an 8-ounce glass; 10 cents.

BLAZE DU BARRY

Lemon syrup	½	ounce
Lemon juice	1	dram
Angostura bitters	1	dram

Carbonated water, coarse stream, enough to fill three-fourths of a 12-ounce glass. Stir in a teaspoonful of powdered sugar and drink during effervescence.

CAPITOL

Blood orange syrup	1	ounce
Grape juice	½	ounce
Sherry syrup	½	ounce
Angostura bitters	1	dash

Mix in a 12-ounce glass, shake vigorously, fill with carbonated water, coarse stream, and serve with straws. This formula makes a fine bitters at 5 cents for 8 ounces; also a delicious egg drink with soda, at 10 cents, or all milk at 15 cents for 12 ounces.

CHERRY COCKTAIL

Cherry juice	1	ounce
Lemon juice	2	ounces
Angostura bitters	1	dram
Sugar	1	teaspoonful
Shaved ice	¼	glass
Carbonated water	2	ounces

Strain with a long thin stream into a cocktail glass with a cherry in it; twist a piece of lemon rind over the drink and serve. The lemon juice, cherry and lemon rind are frequently omitted. Price—10 ounces, 10 cents.

DELMONICO

Orange syrup	1	ounce
Sherry syrup	1	ounce
Angostura bitters	1	dash

Serve as a phosphate. Price—8 ounces, 5 cents.

FAKIR FREEZER

Claret syrup	1	ounce
Catawba syrup	1	ounce
Lemon juice	1	dash
Orange juice	3	dashes
Sol. acid phosphate.	1	dash
Cracked ice	½	glassful

Mix in 8-ounce glass, fill with carbonated water, and serve. Charge 5 cents.

FESTIVAL FIZZ

Rose syrup	½	ounce
Lemon juice	⅛	ounce
Pineapple syrup	1	ounce
Angostura bitters	1	dash
Shaved ice		enough

Place in glass, fill with carbonated water, top off with slice of orange and cherry and serve with spoon and straws. Price—10 ounces, 10 cents.

KNICKERBOCKER BRACER

Cracked ice	¼	tumblerful
Cognac syrup	1	ounce
Cherry malt phosphate syrup	¼	ounce
Extract of anise	1	dash
Catawba cordial	2	dashes
Carbonated water	4	ounces

Stir with a spoon and strain into a wine glass in which has been previously placed a seedless cherry, then immediately over the glass express the oil from a small piece of fresh lemon peel by twisting it between the thumb and forefinger.

Lemon Sour

To 7½ ounces of well-charged water in an 8-ounce glass add the juice of one-half lemon. Serve at once. Charge 5 cents.

Newport Bitters

Into a 10-ounce glass draw ½ ounce cherry syrup, ½ ounce orange syrup and ½ ounce of lemon syrup. Add a dash of orange bitters and fill the glass one-third full of finely shaved ice. Fill the glass with carbonated water, mix thoroughly and decorate with a slice of orange and a cherry. Serve with straws. Charge 10 cents.

Safety First

Lemon syrup	4	drams
Lemon juice	1	dram
Angostura bitters	1	dram

Fill with carbonated water, coarse stream, and add teaspoonful powdered sugar.

Sea Breeze Thirst Quencher

Mint syrup	1	ounce
Orange syrup	½	ounce
Angostura bitters	2	dashes
Shaved ice	½	glass

Garnish with a thin slice of pineapple, creme de menthe cherry and sprig of mint. Serve with straws and spoon. Charge 10 cents.

Sunset Egg Sizzle

Sarsaparilla syrup	2	ounces
Angostura bitters	1	dram
Yolk of one egg		
Shaved ice	2	ounces

Prepare and dispense like other egg drinks. Price—12 ounces, 10 cents.

Third Degree

Shaved ice	¼	glassful
Sweet cherry juice	1	fluid ounce
Lemon juice	1	teaspoonful
Angostura bitters	1	dash
Powdered sugar	1	teaspoonful

Add 2 ounces of carbonated water, mix and strain into a cocktail glass, add a cherry and small slice of lemon peel and serve. Charge 10 cents.

Tonique Fizz

Fill glass half full shaved ice, add white of 1 egg, 3 spoonfuls powdered sugar, 3 dashes angostura bitters, 4 dashes lime juice, 8 dashes solution of acid phosphate. Shake well, pour into 12-ounce bell top glass and fill with vichy in short dashes to make fizz.

Wall Street Pepsin Cordial

Sol. of pepsin, N.F.	1	dram
Lime syrup	1	ounce
Curacoa cordial	½	dram
Shaved ice	½	glassful
Carbonated water	6	ounces

Place in a glass, stir, strain and serve in mineral water glass. Price—10 cents.

World's Fair

Shaved ice	¼	glass
Lemon juice	½	ounce
Checkerberry syrup	1½	ounces
Angostura bitters	3	dashes

Shake and fill glass with ginger ale. Serve with straws. Price—10 ounces, 10 cents.

RICKEYS

Ambrosia

Juice of half lime		
Ambrosia syrup	1	ounce
Shaved ice	½	glass

Mix in a 10-ounce glass, shake vigorously, fill with coarse stream and serve with straws. Charge 10 cents.

August Special

Into a 10-ounce glass draw ½-ounce each of vanilla and pineapple syrups and 1 ounce of grape juice; squeeze the juice of half a lime into the glass, add two-thirds glassful of shaved ice and fill with carbonated water. Mix by tossing. "A delightful thirst-quencher." Charge 10 cents.

Boston

Into a tall, slender 12-ounce glass pour 1½ ounces of grape juice and add the juice of 1 lime freshly expressed (bottled lime juice may be used when necessary); three dashes of angostura bitters, a couple of dashes of solution of acid phosphate, a dash of sherry and sweeten with simple syrup to taste. Fill the glass one-third full of fine shaved ice and the remainder with carbonated water. Mix with a spoon and serve with straws. Price—10 or 15 cents.

Chicago

Raspberry syrup	½	ounce
Pineapple syrup	1	ounce
Lime juice	1	dram
Grape juice	1	ounce
Lemon juice	2	drams

Place all in a 12-ounce glass which has previously been half filled with shaved ice, then fill nearly to the top with carbonated water and mix thoroughly. Decorate with a maraschino cherry. Before serving the "Chicago" crush fresh mint on the ice. Price—10 ounces, 10 cents.

Golden Gate

Blood orange syrup	1	ounce
Lime juice	1	fluid dram

Fill an 8-ounce glass seven-eighths full of carbonated water, coarse stream, add the above syrup, stir, and serve solid. Price—8 ounces, 5 cents.

Grape Rickey

Into an 8-ounce mineral glass put 1 ounce pineapple syrup and 2 ounces grape juice; then add carbonated water, coarse stream, to nearly fill the glass and mix by pouring from one glass to another two or three times; lastly, add a dash of carbonated water, fine stream, and pass the glass to the customer in a "fizzing" condition.

The author found that "grape rickey is the most popular new drink we ever started at our fountain. We now sell it fast enough to open half-gallon containers of grape juice and put in regular syrup tank. The formula is very easy to dispense and the only sign which does the work that we have so far used is the following: Try a Grape Rickey, 5c. It is Sodalicious." Fountain operators may find this special price too low. (Jas. L. Tuohy.)

Lime a la Memphis

Mint syrup	½	ounce
Lemon syrup	½	ounce
Pineapple syrup	½	ounce

Fill tall 6-ounce stem glass one-fourth with shaved ice, squeeze on lime juice and stir. Use carbonated water, fine stream, and serve with Maraschino cherry placed on slice of lime. Charge 10 cents.

Limetta

Four dashes bottled lime juice or juice of one-half lime, two-thirds glass shaved ice, 2 spoonfuls powdered sugar, dash angostura bitters; fill with carbonated water, mix, add a slice of lime or lemon or sprig of fresh mint. Serve with straws. Lemon or plain syrup might be used to advantage in this formula in place of the powdered sugar. Charge 5 cents for 8 ounces.

Lloyd's

Lime juice	6	dashes
A little cracked ice		
Essence of orange flower	3	dashes
Lemon syrup	1	ounce

Fill glass nearly full with carbonated water, stir and cloud with grape juice. Price—10 ounces, 10 cents.

Raspberry

Raspberry syrup	1	ounce
Lime juice	½	ounce
Sol. acid phosphate	1	dash
Mint	1	dash

Serve in an 8-ounce glass; place a slice of lemon and cherries on top and serve with straws.

Santiago

Pineapple syrup	1	ounce
Roman punch syrup	1½	ounces
Lime juice	2	dashes
Shaved ice	1-3	glassful

Place in glass, draw nearly full of carbonated water, coarse stream, stir well with spoon and serve with straws, using large glass. Price—10 ounces, 10 cents.

Summer Cooler

Into a parfait glass half filled with chipped ice draw half ounce of claret syrup, half ounce of lemon syrup and half ounce of pineapple syrup. Squeeze into the mixture the flavor of half a lime rind and fill the glass with plain water, toss, top with a Maraschino cherry and a sprig of mint and serve with two straws. Charge 10 cents. (Wm. Chalk.)

(4) Shakes and Egg Drinks

Within the past few years no drinks have so increased in popularity as the various nutritious and palatable beverages that are included under this heading. The consumption of eggs at the larger fountains in the business sections of the cities has reached tremendous proportions, and is paralleled by the increasing use of malted milk.

The shakes fall naturally into three general classes, dependent upon their principal basic material. The milk shakes are essentially sweet milk and a flavoring to which can be added an egg (egg milk shake), malted milk (malted milk shake) or both (egg malted milk shake). The cream shakes are enriched by the use of sweet cream, and the ice cream shakes by the use of ice cream. All of the shake drinks are in the nature of liquid lunches—in fact the food value of such a drink as egg chocolate malted milk shake is high enough to serve as a substantial meal.

In the preparation of all these shakes the mechanical mixers, usually of the electric type, effect a great saving in time and labor. In fact, in the making of ice cream shakes and malted milk shakes it is not possible to get the smooth, creamy consistency demanded unless a mixer is used.

Except for the simple milk shakes, these drinks should always be served with a couple of crisp, salty crackers. All shakes should be served with straws. Milk and cream used in the preparation of shakes should be cold—a little lump of ice cream in a pinch will remedy any trouble in this respect—for these beverages should always be served very cold to be at their best.

Many fountains have proved that a reputation for shakes and egg drinks makes the best foundation for successful business. This is, of course, more particularly true in the business office neighborhoods, though in the theatre districts there is always a big demand for these lunch beverages.

Fresh eggs are probably the one most important item in the building up of such a trade, and if a dispenser can make arrangements with some farmer or producer of poultry to supply him regularly with day-old eggs, using the announcement of the fact as an advertising feature, he has gone a long way towards capturing this trade. Photographs of the hens and poultry yards from which the eggs come, and signs that tell "All Eggs Used at This Fountain are Delivered *each morning* fresh from the Hazelhurst Farms" or "We use only White Leghorn Eggs, Delivered Daily from the F. H. Smith Farms, Pleasantville" can be used to advantage. Such little wrinkles, (and the enterprising dispenser will find many along this line that he can employ) will afford wonderfully effective publicity for the egg drinks.

SHAKES—PLAIN, CREAM, EGG, ICE CREAM, MILK, ETC.

Old-Fashioned Milk Shake

Put 4 ounces, or less, of shaved ice into a thick 12-ounce tumbler, add 1 ounce vanilla syrup, fill the glass with milk and agitate the whole thoroughly. The shaking may be done in the special machine known as a "milk shaker," or by means of a small hand shaker like that used for making egg drinks. After shaking, strain into another glass and serve. Sprinkle on some powdered nutmeg, if desired. Chocolate or any other non-acidulous syrup may be used if desired (acid syrups tend to curdle the milk). Price—12 ounces, 10 cents.

Milk Chocolate Shake

Chocolate syrup	1	ounce
Sweet milk	enough	

Fill a glass full of shaved ice, put in the syrup, and add the milk until the glass is almost full. Shake well, but do not strain. Top off with whipped cream and serve with straws. Price—10 ounces, 10 cents.

Chocolate Bouche

Chocolate syrup	2	fluid ounces
Shaved or cracked ice	½	glassful
Milk, enough to make 12 ounces.		

Mix, shake well, strain and top off with whipped cream.

Safety First (Milk Shake)

Into a shaker put a ladleful of whipped cream, 1 ounce of chocolate syrup, and one banana, previously mashed. Mix thoroughly, add one dipperful of ice cream, and enough milk to nearly fill a 12-ounce glass; mix thoroughly, and strain into another 12-ounce glass. On top of the mixture float a ladleful of whipped cream and a cherry. Serve with two straws, into the end of one of which a small American flag has been inserted. The author used the following sign to call attention to his "special":

Safety First 15 Cents

Safe, Sane and Refreshing

(J. T. Clapsattle.)

Creme de Cocoa

One-third glass of shaved ice, 1½ ounces chocolate syrup, 2 ounces sweet cream, ¾ tumbler pure milk. Shake and strain into another tumbler into which has been placed 1 tablespoonful whipped cream. Grate chocolate on top and serve.

The above formula makes up a genuine creme de cocoa milk shake.

Dark Horse Special

Into a 10 or 12-ounce glass pour 1½ ounces of good chocolate syrup; add a 16-to-the-quart ladleful of chocolate ice cream and fill the glass with sweet milk to within a half-inch of the top; stir, allowing the spoon to remain in the glass; put in two straws and fill the glass with whipped cream, colored dark brown with caramel, smoothing the top into a conical shape.

In advertising this special the author used placards on which were printed the words, "Try the Dark Horse Special." The placards were placed at various prominent points in the store so as to catch the eye of prospective customers. He states that he wrote the name of this special in black ink on his menu cards, the other special being written in red ink. Price—12 ounces, 15 cents. (Paul J. Grafe.)

Coffee Milk Shake

Coffee syrup	1½	ounces
Powdered sugar	1	tablespoonful
Shaved or cracked ice	½	glassful
Milk enough to fill glass.		

Shake well, strain, and top off with whipped cream.

Coffee Shake

Serve in a 12-ounce glass. One-half fluid ounce of coffee, fill glass half full of shaved ice, then add sugar or simple syrup to sweeten to taste, fill glass with milk and shake thoroughly, top off with nutmeg or cinnamon and serve with straws.

Malted Shake au Cafe

Two ounces malted milk coffee syrup, two-thirds glass shaved ice, 4 ounces milk. Fill with milk, stir rapidly, serve spices to please.

Coffee Shake (Philadelphia Style)

Serve in a 12-ounce glass. Fill glass half full of fine shaved ice, half ounce of pure sweet cream, 1 ounce of coffee syrup, half ounce vanilla syrup, 3 ounces of milk, shake and strain, add sufficient milk to fill glass and pour from shaker to glass.

Coffee Shake a la Rio

Fresh cream	½	ounce
Coffee syrup	1½	ounces
Extract vanilla	1	dash
Plain milk	¾	tumblerful

Shake well in glass half filled with shaved ice, strain and add plain soda in a fine stream. Price—10 ounces, 5 cents.

Golfer's Delight

Plain cream	4	ounces
Malted milk	1	ounce
Coffee syrup	¾	ounce
Grape juice	6	dashes

Shake in glass quarter filled with ice, strain, toss and serve. Price—All milk, 10 cents.

Coffee Cabaret

Into a 10-ounce glass put 1 ounce of coffee syrup, 7 ounces of milk and shake well. Add a No. 16-to-the-quart dipperful of coffee ice cream, and top off with a spoonful of chopped English walnuts. Price, 15 cents.

Old Broadway

Equal proportions vanilla, coffee and cream, with whipped cream, served with cracked ice, milk and straws.

Peach Milk Shake

Peach syrup	1	ounce
Grape juice	½	ounce
Pineapple syrup	½	ounce
Shaved ice	½	glass

Fill the glass with milk, shake well and serve with two straws. Price—10 ounces, 5 cents. The amount of syrup in this formula may be reduced.

Pineapple Shake

Shaved or cracked ice	½	glassful
Vanilla syrup	1	ounce
Pineapple syrup	1	ounce

Milk, enough to fill the glass.

Mix and shake as in the preceding. Price—10 ounces, 5 cents.

Milk Orange

Orange syrup	¼	ounce
Milk	4	ounces
Shaved ice		sufficient
One or 2 eggs		
Horlicks Malted Milk	1	tablespoonful

Put all in a shaker, shake thoroughly, strain and fill the glass with plain or carbonated water. Price, when using all milk and one egg, 15 to 20 cents.

Persian

Shaved ice	½	glass
Ice cream	1	tablespoonful
Milk	1	ounce
Vanilla extract	1	dash
Crushed strawberry	1	teaspoonful
Crushed raspberry	1	teaspoonful
Crushed pineapple	1	teaspoonful
Catawba syrup	1½	ounces

Shake well, then fill glass with carbonated water, in a fine stream. Serve with spoon. Price—12-ounce glass, all milk, 10 or 15 cents.

Findlay's Fruit Milk Shake

Claret syrup	1	ounce
Sweet cream	2	ounces
Mixed fruits	3	ounces
Cracked ice		sufficient

Fill the glass with milk and shake well. Pour into serving glass. Sells for 20 cents.

Commander in Chief

Shaved ice	½	glass
Strawberry syrup	½	ounce
Pineapple syrup	½	ounce
Vanilla syrup	½	ounce

Milk to nearly fill glass.

Shake well, add soda water, fine stream, and pour from tumbler to shaker several times. Serve in a 12-ounce glass, with straws. Charge 10 cents.

Japanese Milk Shake

Almond syrup	2	ounces
Cream	2	ounces
Strawberry syrup	2	ounces

Fill glass nearly full of milk and shake. Add small portion of pistachio ice cream.

Key West Shake

Vanilla syrup	½	ounce
Strawberry syrup	½	ounce
Orgeat syrup	¼	ounce

Place in 10-ounce glass, fill with milk, and top off with whipped cream. Charge 10 cents.

Snowdrift Shake

Catawba syrup	1	ounce
White of an egg		
Shaved ice	½	glass

Milk, enough to fill glass.

Shake well, strain into a 12-ounce glass and serve with whipped cream and a spoon. Price—12 ounces, 15 cents.

Sportsman's Shake

One fresh egg.

Raspberry syrup	1	dash
Sugar	1	teaspoonful

Place in a glass in the order named and fill with milk; shake well and strain in fizz glass. Top off with grated nutmeg. Charge 15 cents.

Mint and Milk

Mint syrup	1½	ounces
Angostura bitters	½	dram
Milk	3	ounces

Carbonated water, coarse stream, to make 8 ounces. Serve solid.

Clam Milk Shake

Clam juice	1½	fluid ounces
Milk	2	fluid ounces
Soda water	5	fluid ounces

Add a pinch of salt and a little white pepper to each glass; shake well. Price—8 ounces, 5 cents.

Cocoa-Coffee

Chocolate syrup	1½	ounces
Coffee syrup	½	ounce
Cream	2	ounces

Mix well and add carbonated water.

Creme de Chocolate

Two fluid ounces chocolate syrup, 1 ounce shaved ice, fill with charged whipped cream. Half fill another glass with cream, and mix by pouring. Price—12 ounce glass, 15 cents.

Fruit Chocolate Shake

Chocolate syrup	2	ounces
Sweet cream	3	ounces
Cracked ice	¼	glass

Shake, strain, then add fine stream carbonated water to fill 12-ounce glass three-quarters full, and ice cream one ladle, dressing the mixture with sliced pears and whole cherries.

Coffee Arctic

Serve in a 12-ounce glass. Use 1½ ounces of syrup, fill one-third full of shaved ice, 1 ounce of pure rich cream, shake thoroughly, withdraw the glass from the shaker, allowing the syrup, etc., to remain in the shaker. Now fill with carbonated water, using the fine stream only, until the shaker contains sufficient to more than fill glass. Pour into glass and back once, then strain into clean glass. Much is added to the appearance of this drink if it is topped off with whipped cream. A spoon of ice cream may be used instead.

Creme du Cafe

Serve in a 12-ounce glass. Coffee syrup, 1½ ounces, ice to fill half full; sweet cream 1 ounce; shake thoroughly, fill with soda water, strain and top off with whipped cream.

Cream Shake a la Orleans

Cream	2	ounçes
Chocolate syrup	1	ounce
Orange syrup	½	ounce

Fill one-fourth of the glass with ice and add cream and syrups and milk enough to fill. Shake well and strain into bell-shaped glass. Serve with straws. This formula makes up as a real cream shake. Add a 16-to-the-quart scoop of ice cream and charge 10 cents.

Zepher Shake

Draw 1 ounce of any desired syrup into a 12-ounce glass and half fill the glass with carbonated water. Draw into another glass 3 ounces of whipped cream and pour the contents of the two glasses together until well mixed. Or, draw about 1 ounce of cream into a 12-ounce glass, add from another glass 4 or 5 ounces of carbonated water and about an ounce of syrup, any desired flavor, then fill the glass with the cream, using a slow stream, stirring constantly meanwhile with a spoon. (Ralph Sprague.)

Mountain Nectar

Pure cream	½	ounce
Orange syrup	½	ounce
Vanilla syrup	½	ounce
Shaved ice	1	glassful

Shake well and add enough carbonated water to fill the glass, and serve with nutmeg. Price—10 ounces, all milk, 10 cents.

Creamed Pineapple

Crushed pineapple	1½	ounces
Cream	2	ounces.
Shaved ice	¼	ounce

Fill 12-ounce glass with rich milk. Shake, toss and serve. Charge 15 cents.

Senatorial Cream Shake

Pineapple syrup	1	ounce
Vanilla syrup	½	ounce
Strawberry syrup	½	ounce
Sweet cream	2	ounces
Ice cream	1	teaspoonful

Place in a mixing glass, shake well and nearly fill glass with carbonated water; transfer to thin glass, fill with carbonated water, fine stream, and top off with a slice of orange or pineapple. Serve with spoon and straws. Price—With the fruit topping, 15 cents.

Ladies' Day Special

Mix in regulation glass:

Vanilla syrup	1	ounce
Strawberry syrup	½	ounce
Shaved ice	½	ounce
Cream	1½	ounces

Shake and fill the glass with milk, finishing with just a dash of fine stream.

Geyser

Strawberry syrup	1	ounce
Orange syrup	1	ounce
Sweet cream	4	ounces
Grape juice	1½	ounces
Cracked ice	¼	glass

Mix, shake, strain, toss and serve with straws.

Fruits and Flowers

Rose syrup	½	ounce
Pineapple syrup	½	ounce
Vanilla syrup	½	ounce
Orange syrup	½	ounce
Plain cream	1	ounce
Shaved ice	¼	glass

Shake, strain, toss and serve.

Daisy Cream Shake

Place a small portion of vanilla ice cream, ½ ounce of orange flower syrup, 1 ounce of raspberry syrup and 2 ounces of sweet cream in a shaker with some cracked ice; shake vigorously, transfer to a tall glass, fill up with milk and top off with whipped cream and chopped citron.

Colonial

Rose syrup	¾	ounce
Pineapple syrup	½	ounce
Orange syrup	½	ounce
Sweet cream	4	ounces
Cracked ice	½	glass

Shake, strain, toss and serve. Dress with whipped cream. Price—All milk, 12 ounces, 10 cents; whipped cream, 15 cents.

Atlantic City Shake

Orange syrup	1	ounce
Pineapple syrup	1	ounce
Sherry wine	2	dashes
Aromatic bitters	2	dashes
Plain cream	4	ounces

Shake, add seltzer and strain. An egg may be added if desired.

Irish Lace Cream Shake

Strawberry syrup	¾	ounce
Pineapple syrup	¾	ounce
Sweet cream	1	ounce
Angostura bitters	1	dash

Add a small quantity of ice cream (one No. 16 scoopful), shake well, put in a 12-ounce glass, add carbonated water, fine stream, and enough ice cream to fill the glass. Garnish with a slice of pineapple and a cherry. Charge 15 cents.

Tropical Cream Shake

Strawberry syrup	¾	ounce
Pineapple syrup	¾	ounce
Sweet cream	1	ounce
Angostura bitters	1	dash

Put in a shaker with a small quantity of ice cream, shake well, transfer to a 12-ounce glass, add a little carbonated water, small, fine stream, and ice cream to fill the glass. Garnish with pineapple and cherry. Charge 10 cents per service.

Hasty Pudding

1 egg		
Pineapple syrup	1	ounce
Lemon juice	2	dashes
Sweet cream	1	ounce
Shaved ice		

Shake well. Add carbonated water, fine stream. Strain into a fancy glass. Top off with nutmeg if so desired. Price—12 ounces, 10 cents.

Banana Cream

Shaved ice	½	tumblerful
Banana syrup	2	ounces
Cream of milk	8	ounces

Shake well, add a few pieces of banana, and fill with soda water, using the fine stream, and serve in a 12-ounce tumbler with spoon and straws. This special may also be served with all milk.

Madagascar Shake

Shaved ice	½	glass
Claret syrup	¾	ounce
Catawba syrup	¾	ounce
Whipped cream	1	tablespoonful

Shake, strain and fill with carbonated water. Charge 10 cents.

Floating Island

Catawba syrup	1	ounce
Cherry syrup	1	ounce
White of 1 egg		
Sweet cream	1	ounce

Shake well and strain, using shaved ice in shaking. Fill with milk. Top off with whipped cream and serve with straws.

Ginger Mint

Crush a small amount of fresh mint with some granulated sugar, then add a small quantity of ginger syrup, about 2 dashes of soluble ginger and an ounce of sweet cream. Fill the glass half full of shaved ice and shake thoroughly. While the drink is still in the shaker, add carbonated water to nearly fill the glass, and then mix well with the fine stream. Pour into a glass, add a couple of cherries and serve with straws.

The ginger mint must be mixed very carefully. It is liable to curdle.

Vienna

A small quantity of shaved ice, some delicately colored pistachio syrup (green) and a small quantity of sweet cream; shake the whole well and fill up the glass with vichy water. Price—10 ounces, 10 cents.

Garden Shake

Rose syrup	½	ounce
Pineapple syrup	½	ounce
Vanilla syrup	½	ounce
Orange syrup	½	ounce
Plain cream	1	ounce
Shaved ice	¼	glassful

Shake, strain, toss and serve. Price—10 ounces, all milk, 10 cents. The syrup in this formula might be cut down. The Garden Shake is a very sweet affair with the 2 ounces of syrup called for above.

Cream Root Beer

Root beer	1½	ounces
Sweet cream	3	ounces
Cracked ice	¼	glass

Shake, fill glass with carbonated water. Strain and serve.

Cream Puff

Draw 1 ounce of the syrup of the flavor desired into a 12-ounce glass and half fill the glass with carbonated water. Draw another glass of the same size half full of charged whipped cream, and pour the contents of both glasses together until mixed.

Chocolate Ice Cream Shake

Into a 12-ounce glass place 1 ounce of chocolate syrup, add 8 ounces of milk and a scoopful of vanilla ice cream (20-to-the-quart); stir and serve. Price 10 cents. The author of this formula states that if chocolate is not desired the best flavors to use are pineapple, vanilla, coffee and strawberry. The cost of the materials employed will not be more than 5 cents, he says.

Chocolate a la Arctic

Shake well together 1 ounce of chocolate syrup, 2 ounces of plain cream, 2 ounces of ice cream and sufficient shaved ice. Serve in a 10-ounce bell glass, filling with carbonated water, fine stream. Price—10 cents.

Wiggle-Waggle

Into a mixing glass put 1½ ounces of chocolate syrup and a No. 12 disherful of vanilla ice cream. Mix thoroughly together with a bar spoon and "fluff" up with carbonated water, fine stream; pour the mixture into an 8-ounce stem glass until the contents reach within half an inch of the top. Then put in a layer of nuts and top off with whipped cream. Price—15 cents. (Harper Huntley.)

Buffalo Shake

Chocolate syrup	½	ounce
Maple syrup	½	ounce
Vanilla ice cream	½	tablespoonful
Plain cream	1	ounce

Ice and shake. Pour into a frappe glass, garnish with whipped cream and a cherry and serve with a spoon and straws. Price—10 cents.

Coffee Cream Shake

Coffee syrup	2	ounces
Plain cream	3	ounces
Ice cream	1	teaspoonful

Shake well with ice; use only fine stream and serve in bell glass.

Coffee Cordial

Yolk of 1 egg		
Coffee syrup	½	ounce
Bitters	3	dashes
Cream or rich milk	2	ounces

Shake with cracked ice, strain and fill with carbonated water. Price—10 cents with carbonated water; 15 cents for all milk.

Czar of Russians Shake

Vanilla syrup	1	ounce
Red orange syrup	1	ounce
Ice cream	2	ounces
Shaved ice	½	glassful

Shake, strain, toss and serve. Price—12 ounces, 10 cents.

Maple Shake

Maple syrup	2	ounces
Plain cream	3	ounces
Ice cream		large teaspoonful

Shake well with ice, use only fine stream and serve in bell glass. Charge 10 cents.

Maple Cream Shake

Maple syrup	2	ounces
Plain cream	3	ounces
Ice cream		large spoonful

Shake well with shaved ice; fill glass with carbonated water, fine stream, and serve.

Maple Pine

Maple syrup	1	ounce
Pineapple syrup	1	ounce
Shaved ice	½	glassful
Ice cream	1	spoonful

Mix in 10-ounce glass with spoon, fill glass with carbonated water, mix again, and top off with grated pineapple. Price, all milk, 10 cents.

Creme de Maple

Maple syrup	2	ounces
Ice cream	2	ounces
Plain cream	1	ounce

Mix, thoroughly shake, then fill with milk and add a spray of mint. A slice of orange goes well here. but such addition is at the option of the dispenser.

Creamed Nut Shake

Nut fruit syrup	2	ounces
Sweet cream	1	ounce
Ice cream	1	ladleful

Shake thoroughly; finish with fine stream and serve with spoon and straws.

Cream Freeze

Shaved ice	½	glass
Ice cream	3	spoonfuls
Orgeat or pistache syrup	2	ounces

Shake, fill with carbonated water and mix with spoon. Price—12 ounces, all milk, 10 cents.

Spicy Shake

Mint syrup	1	ounce
Wintergreen syrup	1	ounce
Sweet cream	1	ounce
Soft ice cream		ladleful

Shake well, use fine stream carbonated water, serve in regular frappe style, top with whipped cream. Price—12 ounce glass, 15 cents.

Pineapple Cream

Pineapple syrup	½	ounce
Ice cream	1	ounce
White of two eggs		

Place in a shaker with shaved ice, shake, strain, fill with all milk, and serve, topped with nutmeg, if desired. Price, 15 or 20 cents.

Orgeat Cream

Orgeat syrup	2	ounces
Sweet cream	4	ounces
Ice cream		dash
Maraschino cherry		

This makes a 10-ounce drink, adding four ounces of milk.

Orange Blend

Vanilla syrup	1	ounce
Red orange syrup	1	ounce
Ice cream	2	ounces
Ice	¼	glass

Shake, strain, toss and serve. Price—12 ounces, all milk, 10 cents.

Ocean Grove Shake

Put into a glass:

Vanilla syrup	2	ounces
Orange syrup	½	ounce
Ice cream	1	ladleful

Shake thoroughly; fill the glass with carbonated water, strain into a clean glass, and top off with whipped cream. In this formula the amount of syrup called for might be cut down. Price—12 ounce glass, 10 cents.

Monarch Shake

Place a small portion of vanilla ice cream, half ounce of orange flower syrup, 1 ounce of raspberry syrup and 2 ounces of sweet cream in a shaker with some cracked ice; shake vigorously, transfer to a tall glass, fill up with carbonated water, using coarse and fine streams alternately, and top off with whipped cream and chopped citron. Price—12 ounce glass, 10 cents.

"Co-ed" Shake

Vanilla syrup	1	ounce
Orange syrup	1	ounce
Ice cream	1	spoonful
Shaved ice	¼	glass

Shake, strain, toss and serve. Charge 10 cents for 12-ounce glass.

Blizzardine

Shaved ice	½	glass
Ice cream	1	tablespoonful
Orgeat syrup	1	ounce
Catawba syrup	½	ounce

Shake well and fill glass with carbonated water. Price—12 ounce glass, 10 cents.

Angel Food

Vanilla syrup	1	ounce
Red orange syrup	1	ounce
Ice cream	2	ounces
Ice	¼	glass

Shake, strain, toss and serve. Price—12 ounces, all milk, 10 cents.

Banana a la Manhattan

Draw 1 ounce of sweet cream in a 12-ounce glass, add 1 ounce of vanilla syrup and into the mixture slice half of a banana. Now add a portion of ice cream, shake thoroughly and fill glass with the milk. Pour without straining into a clean glass and top off with whipped cream and serve with spoon. Price—all milk, 15 cents.

Diplomatic Shake

Grape juice	2	ounces
Sweet cream	2	ounces
Ice cream	1	spoonful
Bitters	3	dashes

Shake thoroughly, strain, pour back into shaker and add carbonated water to fill glass; throw as in mixing egg drinks. Serve with paper napkin and place nutmeg handy. Price—12 ounces, 10 cents.

Fruit Mix

Two ounces punch syrup and a small lump of ice cream. Shake until smooth and add 1 large spoonful cut candied fruits. Add carbonated water, then another lump of the cream and serve. Price—12 ounces, 15 cents.

Frosted Fruit

Shaved ice	½	tumblerful
Ice cream	1	tablespoonful
Pure milk	1	ounce
Extract of vanilla	1	dash
Crushed strawberry	1	teaspoonful
Crushed pineapple	1	teaspoonful
Crushed raspberry	1	teaspoonful
Catawba syrup	1½	ounces

Shake well, then add carbonated water. Serve with spoon.

Tropical Shake

Crushed orange	½	ounce
Crushed cherry	½	ounce
Crushed pineapple	½	ounce
Sweet cream	1	ounce
Ice cream	1	spoonful

Shake well, using both streams, fine and coarse. Serve in a frappe glass. Top off with sliced pineapple and cherry, and serve with straws. (Ralph Sprague.)
Charge 15 cents.

Superlative Shake

Shaved ice	½	tumblerful
Ice cream	1	tablespoonful
Pure milk	1	ounce
Vanilla syrup	½	ounce
Crushed fruits	3	teaspoonfuls
Catawba syrup	1½	ounces

Shake well, then add enough carbonated water, fine stream, to fill glass. Serve with spoon.

Glad We're Here

Into a mixing glass put:

Strawberry syrup	¾	ounce
Pineapple syrup	¾	ounce
Sweet cream	1	ounce
Angostura bitters	1	dash

Add a small quantity of ice cream. shake well, put into a 12-ounce glass, add a little carbonated water, fine cream, and enough ice cream to fill glass. Garnish with sliced pineapple and a cherry. Price—12 ounces, 15 cents.

Beaux and Belles

Draw ¾ ounce each of pineapple and orange syrups into a 12-ounce glass, add 2 or 3 dashes of acid phosphate, shaved ice, and 1 tablespoonful of ice cream. Shake well, add enough carbonated water to fill glass, pour from glass to shaker and serve.

Garden of Eden

Shaved ice	½	glass
Ice cream	1	tablespoonful
Sweet milk	1	ounce
Extract of vanilla	1	dash
Crushed strawberry	1	teaspoonful
Crushed raspberry	1	teaspoonful
Crushed pineapple	1	teaspoonful
Catawba syrup	1½	ounces

Shake well, fill glass with carbonated water, and serve with spoon.

Cardinal Shake

Raspberry syrup	1	ounce
Pineapple syrup	1	ounce
Sherry wine	3	dashes
Ice cream		ladleful
Cracked ice		

Shake well, add carbonated water, fine stream, and strain into fancy glass.

Egg Milk Shake

Syrup, any desired flavor	1	ounce
Ice, finely shaved	¼	glassful
Milk, enough to make 12		ounces

Shake and strain.

This formula makes a genuine milk shake. Use very little ice. Charge 15 cents.

Egg Vichy

One egg		
Shaved ice	½	glass
Pure water	1	ounce

Shake thoroughly; then add slowly, while constantly stirring enough vichy water to fill the glass. Price—12 ounces, 10 cents.

Chocolate Egg Shake

Chocolate syrup	2	ounces
Cracked ice	1	ladleful
Egg	1	
Milk, enough to nearly fill glass.		

Draw the syrup into the glass, add the egg and cracked ice, then fill the shaker about one-third full of milk and shake again. Finally add the balance of the milk to fill the shaker about two-thirds full. Shake well and strain into a clean glass. Top off with a little powdered mace, nutmeg or cinnamon.

The above formula is recommended for making chocolate egg shake. Price—12 ounces, 15 cents.

Egg Chocolate

Chocolate syrup	1	ounce
White and yolk of 1 egg		
Crushed ice, small quantity		

Shake well, then add plain carbonated water sufficient to fill tumbler. Stir with twist bar spoon, strain, then pour alternately from tumbler to shaker, and serve. This drink is rather thin and should not be priced at more than 10 cents.

Malted Milk Egg Chocolate

One ounce chocolate, plain cream, 2 spoonfuls, malted milk, small amount ice cream, 1 beaten egg. Shake well, strain and serve, all milk, with nutmeg, if desired. Charge 15 or 20 cents.

Egg Malted Milk

Egg	1	
Vanilla syrup	1 or 2	ounces
Plain cream	3	ounces
Malted milk	2½	teaspoons

Put syrup in mixing glass, adding the malted milk last, just before shaking. Shake well with ice, use fine stream only, and serve in bell glass. This drink is much more satisfactory if all milk is used. Use very little ice—the shake is easily spoiled. Price—12 ounces, 15 or 20 cents.

The Iron Cross

Chocolate syrup	1½	ounces
Grape juice	2	ounces
Sweet cream	1	ounce
Malted milk	1	teaspoonful
Egg	1	

Mix, shake, strain in 12-ounce glass and fill with fine stream. Price—15 or 20 cents. (J. M. Hahne.)

Piff Paff Puff

Place in a glass the white of one egg, sweet cream, 2 ounces, and whip well. Then add chocolate syrup, 1½ ounces. Shake well, fill with carbonated water, pour into a 12-ounce glass and serve without straws.

Hawaiian Chocolate Shake

Break and separate an egg; beat up the white with half an ounce of chocolate syrup, and the yolk with a similar quantity of pineapple crushed fruit syrup; beat the two mixtures well together and then shake up with an ounce of chocolate syrup and a 16-to-the-quart disherful of vanilla ice cream. Pour into a 12-ounce glass and fill with carbonated water, fine stream. Serve with two straws. This formula may be much improved by dispensing all milk and charging 20 cents for 12 ounces. (Beverly F. Towne.)

Conger's Egg Chocolate

Chocolate syrup	1	ounce
Vanilla syrup	½	ounce
1 egg		
Piece of ice, size of walnut		

Shake well together, add plain soda and pour from shaker to glass three times; top off with nutmeg. Price—12 ounces, 10 cents.

Egg Chocolate

Put 2 ounces chocolate syrup in a heavy glass, break and drop in one egg, add 3 ounces plain cream and shaved ice, shake well and use only fine stream of soda water.

Egg Coffee

Serve in a 12-ounce glass. Use:

Coffee syrup	1	ounce
Egg	1	
Sweet cream	1	ounce
Ice	a little	

Shake thoroughly and proceed as in preparing of other egg drinks. Charge 15 cents.

After Work

Coffee syrup	1½	ounces
Cream	1	ounce
Angostura bitters	3	dashes
Don't care syrup	½	ounce
One egg		
Shaved ice	½	glassful

Shake, fill glass with carbonated water and strain. Price—12 ounces, 10 cents.

Boston Egg Flip

Serve in a 12-ounce glass:

Egg	1	
Coffee syrup	1½	ounces
Fresh, sweet cream	1	ounce
Angostura bitters	3	dashes
Fine shaved ice	a small quantity	

Shake thoroughly, add carbonated water and strain as in preparing other egg drinks.

Egg Malted Milk Coffee

Prepare same as malted milk coffee with the exception of adding the egg before shaking, and top off with a little nutmeg if desired. This drink is sometimes called Coffee Light Lunch, sells readily at 15 cents a glass.

Creme de Luxe

Cream syrup	1	ounce
Extract of vanilla	1	dash
Shaved ice	½	glassful
White of 1 egg		

Shake well, strain, fill glass with milk, and serve with nutmeg. Price—15 cents.

Orange Spray

Egg	1	
Orange syrup	1	ounce
Orange bitters	2	dashes
Sweet cream	1	ounce

Dispense in glass half filled with shaved ice, shake and use fine stream carbonated water. Top off with nutmeg. Price—12 ounces, 10 or 15 cents.

American Gentleman

Juice of 1 orange		
Powdered sugar	3	teaspoons
Egg	1	
Grape juice	1	ounce
Port wine	¼	ounce
Shaved ice	small quantity	

Fill glass with plain water; shake, put in lemonade glass, finish with a slice of pineapple and a cherry. The "American Gentleman" may be livened up by the application of a little fine stream. Price—12 ounces, 20 cents.

Egg Puff

Into a 12-ounce mixing glass, put one egg, 1 ounce orange syrup, 1 No. 16-to-the-quart dipperful vanilla ice cream, 2 ounces sweet milk; shake thoroughly, add carbonated water, fine stream first, and completing with coarse stream. Top with whipped cream. Price—12 ounces, 15 cents. (Paul Anderson.)

White Mountain

Orange syrup	2	fluid ounces
Cream	3	fluid ounces
White of 1 egg		
Shaved or cracked ice	½	glassful

Shake well, strain into a 12-ounce glass and fill with milk. Price—15 cents.

Canary Puff

Into a shaker or mixing glass put 1½ ounces of blood orange syrup, the white of an egg, three or four teaspoonfuls of Maraschino cherry syrup, one ladleful of vanilla ice cream; shake well, add carbonated water, fine stream, and a Maraschino cherry. Serve with a spoon in a 12-ounce glass. Price—15 cents. (Otis Brown.)

Naranga Shake

Shaved ice	½	tumblerful
1 egg		
Vanilla syrup	1	fluid ounce
Orange syrup	1	fluid ounce
Ice cream	1	tablespoonful

Add a few dashes of bitters and orange extract. Fill the glass nearly full of cream, grate a little nutmeg on top, add sufficient carbonated water, fine stream, and serve with spoon and straw. Charge 15 cents.

Big Gun Egg

Juice of 1 lemon		
Egg	1	
Powdered sugar	1	tablespoonful
Shaved or cracked ice	2	ounces

Shake thoroughly, strain into a 12-ounce glass, and fill with ginger ale. Charge 15 cents. The Big Gun Egg is a good thirst quencher.

Malted Milk Lemonade

Break a fresh egg into a mixing glass and add the juice of one lemon, 1½ ounces rock candy syrup, shaved ice, a sufficient quantity, 1½ teaspoonfuls of malted milk, and a dipperful of ice cream. Shake well, transfer to a bell glass and fill with carbonated water, fine stream, and serve. (John S. Flemming.)

Lime Sour Egg Shake

Take a 12- or 14-ounce glass and place in it one ounce of lime freeze, one egg, one small dipperful of ice cream and about 8 drops solution of acid phosphate. Shake well and fill the glass with carbonated water; stir with a spoon. Price—12 ounces, 10 cents.

Pineapple Puff

Into a mixing glass containing 2 ounces plain, sweet cream, add 1 egg white, beat with spoon until well whipped, add 1½ ounces pineapple syrup, transfer into shaker and add carbonated water from both streams; then pour from shaker to 12-ounce glass and serve without straws. Charge 10 cents.

Egg Flip

Vanilla syrup	1 ounce
Pineapple syrup	1 ounce
Plain cream	3 ounces
Shaved ice	
Egg	1

Shake, strain and toss and serve with straws. Price—All milk, 15 cents.

Snow Flurries

Pineapple syrup	¾ ounce
Vanilla syrup	¾ ounce
Ice cream	2 ounces
Shaved ice	¼ glassful
Egg	1

Break the egg into the glass, add the other ingredients, shake, strain and toss, adding the carbonated water last. (S. M. Sanborn.)

Cupid's Delight

Use a lemonade shaker. Put in a No. 16 dipperful of soft vanilla ice cream, 2 teaspoonfuls pulverized sugar, one dipperful of pineapple ice and one egg; beat the mixture well with a spoon and draw on fine stream of carbonated water to make a 12-ounce drink; top off with whipped cream and serve with two straws. No syrup is required in this drink. Price—12 ounces, 10 cents. (Howard E. Rollison.)

Niagara

Pineapple syrup	2 fluid ounces
Plain water ice	2 ounces

Beat the white of an egg and add to the above mixture in a 12-ounce glass, mix with a spoon, and fill the glass with carbonated water, fine stream. Charge 10 cents.

Cherryblossom Egg Shake

Cherry syrup	1½ ounces
Ginger	½ ounce
Ice cream	2 ounces
White of one egg	

Mix and shake with cracked ice. Serve in 12-ounce glass and top with nutmeg. (B. K. Keeler.)

Grape

Break into a suitable glass one egg and add 4 ounces of sweet cream, about 2 ounces of grape juice, and 1½ ounces of shaved ice. Add sufficient sugar to sweeten, shake thoroughly, toss and serve with straws. A 15-cent drink. Might charge 10 cents and make a present of it.

Chautauqua Shake

Into a mixing glass break one egg and upon it draw 1 ounce of vanilla syrup, 1 ounce of grape juice and 1 ounce of sweet cream. Add sufficient cracked ice, mix well, fill glass with carbonated water or milk, and top off with nutmeg. Serve with two straws.

Cider Egg

Vanilla syrup	2 ounces
Sweet cider	6 ounces
One egg	
Shaved ice	3 ounces

Shake well, put into a 12-ounce glass and serve with straws. A little of the fine stream might make this a snappier drink.

Egyptian Egg Shake

Orgeat syrup	2 ounces
Egg	1
Sweet cream	2 ounces

Shake with ice and fill 12-ounce glass with milk, touching up at end with fine stream. Charge 15 cents. (Henry Lee.)

Little Red Hen

Raspberry vinegar	½ ounce
Raspberry syrup	2 ounces
Egg	1
Shaved ice	¼ glassful

Mix and transfer to a 12-ounce glass, fill with carbonated water, strain and serve with straws. Charge 10 cents.

Strawberry Egg Shake

To 1 egg in mixing glass, add 2 ounces of strawberry syrup, 2 ounces plain cream, shake well with ice; use fine stream and serve in bell glass. Charge 10 cents.

California Egg Milk Shake

White and yolk of 1 egg	
Cracked ice	¼ tumblerful
Nectar syrup	1¾ ounces

Shake, strain, finish with milk, and serve in a thin soda glass with grated nutmeg. Price—12 ounces, 15 cents.

Good Samaritan

White and yolk of 1 egg	
Cracked ice	¼ glassful
Nectar syrup	1¼ ounces
Milk	¼ glassful

Shake, strain, and serve in thin soda glass with grated nutmeg. Price—15 cents.

Charlotte Shake

To small quantity of shaved ice in a tumbler, add 1 whole egg, a little sweet cream and highly flavored Maraschino syrup; shake the whole well and fill up the glass with milk. Price—12 ounces, 15 cents.

Pall Mall Shake

Queen nectar syrup	½ ounce
Clarade syrup	1 ounce
White and yolk of 1 egg	
Fresh cream	
Cracked ice	1 ounce
	¼ glass

Shake well together, strain and add 1 dash curacoa cordial and carbonated water sufficient to fill tumbler.

Arion

Apricot syrup	½ ounce
Peach syrup	½ ounce
Rose syrup	½ ounce
Plain cream	2 ounces
Egg	1
Ice	¼ glass

Shake, strain, toss and serve. Price—12 ounces, all milk, 15 cents.

Republic Egg Shake

Raspberry syrup	1 ounce
Angostura bitters	1 dash
Egg	1
Malted milk	1 teaspoon
Sweet milk	2 ounces
Cracked ice	a few pieces

Shake well, strain, add fine stream carbonated water to fill 12-ounce glass; finish with whipped cream; serve with straws. (Maud Irma.)

Patriotic

Into a mixing glass break 1 egg; then add ½ ounce cherry syrup, ½ ounce strawberry syrup; ½ ounce claret syrup and 1 ounce vanilla ice cream, as follows: First break the egg into the glass, put in the ice cream, syrup, and two dashes of solution of acid phosphate. Add two small pieces of ice. Shake, strain, toss and serve with nutmeg on top. Should bring 15 cents. (J. D. Hamble.)

Alan Dale

Lemon syrup	½ ounce
Raspberry syrup	½ ounce
Orange syrup	1 ounce
Sweet cream	2 ounces
Egg	1
Cracked ice	

Shake, strain, add carbonated water, toss and serve.

Olympic Egg Shake

Shaved ice, a small quantity	
Juice of 1 lemon	
Grape juice	1 ounce
Egg	1
Powdered sugar	2 tablespoonfuls

Dispense in a 12-ounce glass and fill with carbonated water, fine and coarse streams. Serve straight in a 12-ounce lemonade glass and garnish with orange and cherry. Charge 15 cents.

Nadja

Shaved ice, a little heavy raspberry syrup, the white of one egg and a little cream; shake well and fill the tumbler with vichy water. Price—10 ounces, 10 cents.

Royal Mist

Orange syrup	1 ounce
Catawba syrup	1 ounce
Cream	2 ounces
One egg	

Mix according to art and finish with soda. Serve with straws. Price—12 ounces, 10 cents.

King of Hearts

Pineapple syrup	1 ounce
Raspberry syrup	1 ounce
Egg	1
Rich milk	2 ounces

Add dash of bitters and shake with spoonful of ice cream, strain and serve as other egg shakes. Finish with coarse and fine streams. Charge 10 cents for 12-ounce glass.

Midget Egg

Into a mixing glass draw half ounce of pineapple and half ounce of orange syrup, and into this break one egg and add a little sweet cream and shaved ice. Shake thoroughly and add a small amount of carbonated water, fine stream, and strain into an 8-ounce bell-shaped glass. Charge 10 cents.

Queen's Favorite

Strawberry syrup	1 ounce
Pineapple syrup	1 ounce
Vanilla syrup	1 ounce
Sweet cream	4 ounces
Egg	1
Ice and carbonated water	sufficient

Charge 15 cents.

Lunar Blend

Take two mixing glasses, break an egg, putting the yolk in one glass, the white into the other; into the glass with the yolk add one ounce cherry syrup and some cracked ice, shake, add small quantity carbonated water and strain into a 12-ounce glass. Into the other mixing glass add one ounce plain sweet cream and beat with bar spoon until well whipped, add one-half ounce lemon syrup, then transfer it into shaker and add carbonated water from fine stream only and float on top of the yolk and cherry syrup. Serve with two straws.

Marinoo Shake

Mix in glass one egg, equal parts of vanilla and pineapple syrups to make 1½ ounces, dash of ice cream, a little cracked ice. Shake well. Have ready a large bell glass with half ounce of crushed strawberry. Now turn the fine stream into the shaker, pour into the mixing glass, which empty by pouring from a height into a bell glass, so as to mix the strawberry with the rest of the syrup. Price—12 ounces, 15 cents.

Manhattan Egg Cream Shake

Pineapple syrup	¾ ounce
Vanilla syrup	¾ ounce
Ice cream	2 ounces
Cracked ice	¼ glass
Egg	1

Shake, strain, toss and serve. Price—12 ounces, 15 cents.

Cashier's Egg Shake

Strawberry syrup	¾ ounce
Pineapple syrup	¾ ounce
Sweet cream	2 ounces
Angostura bitters	1 dash
Shaved ice	1 ounce
One egg	

Shake, strain, using carbonated water, coarse stream. Pour from glass to shaker and vice versa. Grate nutmeg on top. May be served as a hot drink by using hot water instead of carbonated water, but served cold this shake is much more tasty. Should attract the "junketers." Price—12 ounces, 10 cents.

Old Kentucky

One egg	
Don't care syrup	1 ounce
Champagne phosphate syrup	1 ounce
Sweet cream	1 ounce
Shaved ice	¼ glassful

Shake thoroughly, fill glass with carbonated water and strain. Price—12 ounces, 10 cents.

Lunarette

Grape syrup	1 ounce
Vanilla syrup	½ ounce
Ice cream	2 tablespoonfuls
Egg	1
Shaved ice	¼ glass

Shake, strain, finish with milk, and serve. Price—12 ounces, 15 cents.

American Beauty

Rose syrup	½ ounce
Pineapple syrup	1 ounce
Port wine	4 dashes
Egg	1
Plain cream	2 ounces
Ice	¼ glass

Shake, strain, toss and serve. Price—12 ounces, all milk, 15 cents.

Canadensis Shake

Almond syrup	½ ounce
Raspberry syrup	1 ounce
Egg	1
Milk to fill glass	
Ice	¼ glass

Shake, strain, toss and serve. Charge 15 cents.

Washingtonian Egg Shake

Grape juice	2 ounces
Juice of half a lemon	
Powdered sugar	2 teaspoonfuls
Egg	1
Cracked ice	
Plain water	2 ounces

Shake together well. Prepare a large goblet in the following manner: In bottom of glass put pieces of ice, one tablespoonful of pineapple sherbet. Over this pour a ladleful of grated pineapple, then strain the contents of shaker over all, garnish with fruit and serve with a spoon and straws. Charge 20 cents.

American Derby

One egg	
Sherry syrup	2 ounces
Ice cream	2 tablespoonfuls
Shaved or cracked ice	¼ glassful

Shake, strain, toss and serve. Price—12 ounces, all milk, 15 cents.

Brazilian Shake

Raspberry syrup	2 ounces
Pineapple syrup	½ ounce
Sweet cream	3 ounces
One egg	
Cracked ice	¼ glass

Shake, strain, toss and serve. Price—12 ounces, all milk, 15 cents.

Royal Golf

Into a suitable glass break the egg and add the syrup of raspberry, cream, shaved ice, a few dashes of solution of acid phosphate. Fill glass with carbonated water, coarse stream, and then pour all into another glass, repeating the operation until a foaming drink is produced. Charge 10 cents.

Sea-side Shake

Vanilla syrup	1 ounce
Orange syrup	½ ounce
Grape juice	½ ounce

Draw into a 12-ounce glass; into this mixture break an egg and add a dash or two of angostura bitters, 1 ounce of sweet cream and a little ice; shake thoroughly, fill the glass with carbonated water, and strain into a clean glass; top with spice, if desired.

Kansas High Ball

Juice of 1 lemon	
Grape juice	3 ounces
Egg	1
Simple syrup to sweeten	
Cracked ice	half a scoop
Water	

Mix in a glass, shake well, jerk up with carbonated water, fine stream, strain and serve in 8 or 10-ounce stem glass. Price, 15 cents. (Vance R. Thralls.)

Humdinger

Cherry syrup	1½ ounces
1 egg	
Ginger extract	dash
Sol. of acid phosphate	dash

Shake well, strain and fill 12-ounce glass with fine and coarse streams. Charge 10 cents. (H. C. Baldwin.)

Alaska Snowball

Pineapple syrup	½ ounce
Lemon syrup	½ ounce
Orange syrup	½ ounce
Egg	1
Plain cream	2 ounces
Shaved ice	¼ glass

Shake, strain, toss and serve. Drop in a ball of pineapple ice or ice cream to float on the surface and the Alaska Snowball is a winner. Price—15 cents; all milk, 20 cents.

Sea Breeze

Shaved ice	½ tumblerful
Egg	1
Vanilla syrup	1 fluid ounce
Orange syrup	1 fluid ounce
Grape juice	½ ounce
Bitters	2 dashes

Fill the glass nearly full of milk, shake well, grate a little nutmeg on the top, add a little soda water (fine stream), and serve with spoon and straws.

Hindoo

White of 1 egg	
Pure cream	½ ounce
Shaved ice	¼ glass
Catawba syrup	½ ounce
Lemon syrup	½ ounce
Pineapple syrup	½ ounce

Shake well and add carbonated water, both streams. Serve with nutmeg.

Glasgow Egg Shake

Cherry syrup	½ ounce
Orange syrup	½ ounce
Sherbet syrup	½ ounce
Plain cream	1½ ounces
Egg	1
Ice	¼ glass

Shake, strain, toss and serve. Price—12 ounces, 10 cents.

Fruit Blend

Pineapple syrup	½ ounce
Vanilla syrup	½ ounce
Orange syrup	½ ounce
Egg	1
Plain cream	2 ounces
Sherry wine	2 dashes
Ice	¼ glassful

Shake, strain, toss and serve. Price—12 ounces, all milk, 15 cents.

Pocahontas Shake

Raspberry syrup	½ ounce
Orange syrup	½ ounce
Pineapple syrup	½ ounce
Lime juice	½ dram
One egg	

Break the egg into a soda glass containing some fine ice, add the other ingredients, shake thoroughly, fill glass with carbonated water and strain. Price—12 ounces, 10 cents.

Egg Shake a la New Orleans

Break 1 egg in mixing glass, add 1 ounce catawba syrup, 1½ ounces brandy syrup, 2 ounces plain cream, shake well with ice and use carbonated water, fine stream, to fill; serve in bell glass.

Campus Shake

Raspberry syrup	2	fluid ounces
Orange syrup	½	fluid ounce
One egg		
Ice shavings	2	ounces
Milk enough to fill a 12-ounce glass		

Shake well, strain, fill the glass with the fine stream of carbonated water and sprinkle over the foam a small quantity of grated nutmeg. Charge 15 cents.

Egg Shake a la Kalamazoo

Celery syrup	2	ounces
Cream	2	ounces
Egg	1	

Shake, strain and toss. Price—12 ounces, all milk, 15 cents.

New England Egg Shake

Lemon syrup	½	ounce
Pineapple syrup	1	ounce
Egg	1	
Cracked ice	¼	glass

Shake, strain, toss and serve with nutmeg or cinnamon. Price—12 ounces, 10 cents.

Scientific Egg Shake

Pineapple syrup	½	ounce
Lemon syrup	½	ounce
Orange syrup	½	ounce
One egg		
Plain cream	2	ounces
Shaved ice	¼	glass

Shake, strain, toss and serve in a 12-ounce glass, filling with fine and coarse streams.

Egg Shake a la Francais

Champagne syrup	1	ounce
Egg	1	
Cracked ice	small quantity	

Shake together with hand shaker; then add enough carbonated water to fill the glass. Mix well by pouring from tumbler to shaker; strain through julep strainer into tumbler. Add a little grated nutmeg and serve.

Egg Nutrine

Egg	1	
Raspberry syrup	½	ounce
Claret syrup	½	ounce
Angostura bitters	2	dashes
Sweet cream	2	ounces
Shaved ice		

Shake well, strain, transfer to a 10-ounce glass, fill with carbonated water, and serve. Charge 10 cents. (James N. Morris.)

Don't Care Egg Shake

"Don't Care" syrup	1	ounce
Sherry	4	dashes
Egg	1	
Cream, a little		
Cracked ice		

Shake well, fill glass with carbonated water, fine stream, strain into a clean glass and sprinkle ground nutmeg on top. This beverage is improved by serving all milk.

White Velvet

Pineapple syrup	1	ounce
Orange syrup	½	ounce
Colonial punch syrup	½	ounce
White of egg		
Cracked ice	1-3	glass

Shake, strain, toss and serve. Price—All milk, 15 cents.

Varsity Egg Shake

Into a 12-ounce glass draw one ounce of orange syrup, one ounce of pineapple syrup. Into this break an egg and add one ounce of port wine and a little finely shaved ice. Shake thoroughly and proceed to fill the glass with milk. Strain into a soda glass and serve. Price—12 ounces, 15 cents.

Delight

Strawberry syrup	½	ounce
Raspberry syrup	½	ounce
Grape syrup	½	ounce
Egg	1	
Plain cream	1½	ounces
Ice	¼	glass

Shake, strain, toss and serve.

Chicago Egg Shake

Into a 12-ounce glass draw one ounce of strawberry syrup and half ounce each of raspberry and pineapple syrups; then add 1½ ounces of sweet cream. Into the mixture break a fresh egg and add a little ice. Shake thoroughly, fill glass with carbonated water, dispensing as you would other egg drinks.

Princeton Tiger

Orgeat syrup	2	ounces
Fresh cream	½	ounce
Yolk of one egg		
Shaved ice	¼	glass
Milk	12	ounces

Price—15 cents.

Sorosis Egg Shake

Draw one ounce of strawberry syrup and one-half ounce of pineapple syrup into a 12-ounce glass and add one and one-half ounces of sweet cream. Into this break an egg, add sufficient shaved ice, shake thoroughly, fill with carbonated water and serve with a spoon. If desired a whole strawberry or two may be added. Charge 10 or 15 cents.

Catch of the Season

Into a suitable glass containing half ounce each of strawberry and pineapple syrups, break an egg, adding two teaspoonfuls of sweet cream and two ounces of shaved ice. Shake thoroughly, add a little carbonated water and strain into a ten-ounce glass. Fill with fine stream.

Sans Souci Shake

Pineapple syrup	½	ounce
Orange syrup	½	ounce
Vanilla syrup	½	ounce
Egg	1	
Ice cream	1	ounce
Cracked ice	¼	glass

Shake, strain, fill with carbonated water, toss and serve. Price—12 ounces, 15 cents.

Boston Special Shake

Into a 12-ounce mixing glass break a fresh egg, add half ounce vanilla syrup, half strawberry syrup, two or three dashes of solution of acid phosphate, half teaspoonful of malted milk, and fill the glass to within two inches of the top with sweet milk. Shake well, strain and toss, then add carbonated water to fill the glass and finally sprinkle with ground nutmeg. Price, 15 cents.

North Pole Shake

White and yolk of 1 egg		
Lemon syrup	½	ounce
Orange syrup	½	ounce
Raspberry syrup	½	ounce
Fresh cream	½	ounce
Shaved ice	1	tumblerful

Shake well in milk shaker, then add carbonated water to fill glass. Stir and serve with straws.

Merry Widow

Grape syrup	1	ounce
Orgeat syrup	1	ounce
Sweet cream	1	ounce
One egg		

Place in glass, add a little ice, shake, fill with milk and strain. Price—12 ounces, 15 cents.

Bonnie Belle

Pineapple	¼	ounce
Vanilla syrup	¼	ounce
Ice cream	2	ounces
Cracked ice	¼	glassful
Egg	1	

Shake, strain, toss and serve. Charge 15 cents.

Royal Shake with Egg

Break one egg in mixing glass and add:

Catawba syrup	1	ounce
Vanilla syrup	1	ounce
Strawberry syrup	½	ounce
Plain cream	2	ounces

Shake well with ice; use milk and serve in bell glass. Charge 15 cents.

Navy Egg Shake

Into a 14-ounce glass draw two to two and a half ounces of strawberry syrup. Into this break two eggs and add a few dashes of Jamaica ginger, one to two ounces of sweet cream, and a little fine shaved ice. Shake thoroughly and fill with carbonated water, using fine stream mostly. Strain into a clean glass and serve. May be topped with spice, if desired. The carbonated water should be added to the syrup and eggs in the shaker and from the shaker strained into the serving glass. Price—12-ounce glass, 20 cents.

Egg Birch

Birch syrup	1½	fluid ounces
Egg	1	

Place in shaker, fill with milk, shake, and strain into a 12-ounce glass. Charge 15 cents.

May Tonic

Yolk of egg	1	
Sarsaparilla syrup	2	ounces
Milk	½	glass

Shake and strain. Fill with broad stream. (S. S. Jones.)

Sizzler Shake

Sarsaparilla syrup	2	ounces
Angostura bitters	1	dram
Egg	1	
Shaved ice	2	ounces

Prepare and serve as other egg shakes, using fine and coarse streams. Price—12 ounces, 10 cents.

Floral Cream

Syrup of fragrant flower	1½	ounces
Cream	4	ounces
White of one egg		

Mix. Violet syrup and rose syrup are best adapted for this composition, the cream being named accordingly.

Marshmallow Egg Shake

Marshmallow syrup	1	ounce
Ice cream	1	ounce
Egg	1	

Shake together in a shaker, or glass, and strain into a 12-ounce glass, nearly filling the latter with carbonated water, coarse stream, and "finish" with the fine stream. The use of milk improves this shake.

Best Bracer

Mint syrup	1	ounce
Lemon syrup	½	ounce
Pineapple syrup	1	ounce
Egg	1	

Add carbonated water, shake and strain into a 12-ounce glass, then add two dashes of acid phosphate.

Temptress Egg Shake

Catawba	2	ounces
White of 1 egg		
Shaved ice		

Fill with milk and shake thoroughly. Top off with whipped cream and serve with a spoon. Charge 15 cents.

Cupid's Dream

Egg	1	
Champagne syrup	1	ounce
Catawba syrup	½	ounce
Lactart	1	dash
Cracked ice	½	tumblerful

Shake well and fill with carbonated water, both fine and coarse streams. Pour from tumbler to shaker and strain and serve with grated nutmeg.

Heap of Comfort

Into a 12-ounce glass one-fourth full of cracked ice, break one egg and add one teaspoonful of malted milk, half ounce of clam bouillon, and 1 ounce of hock syrup. Shake well, strain, add a dash of solution of acid phosphate, and fill with soda water. Pour from shaker to tumbler, top off with nutmeg and serve with straws.

Yama

Shaved ice as usual, a small quantity of ginger syrup, a few drops of cognac and one whole egg; shake well and fill up with apollinaris.

Egg' Calisaya

White and yolk of 1 egg		
Cracked or shaved ice	½	tumblerful
Elixir calisaya	3	dashes
Lemon syrup	1¼	ounces

Shake well, strain, and add carbonated water, first coarse, then fine, stream. Pour from tumbler to shaker alternately several times, and grate nutmeg on top and serve. Price—12-ounce glass, 10 cents.

(5) Specialty Beverages

Here are included those drinks of a standard proprietary nature and medicinal value.

Many progressive dispensers have come out as flatly against the serving of medicines at the fountains. Others in charge of large and successful establishments have been equally positive in their defence of the sale of certain preparations of this nature.

There is room for argument on both sides and the individual fountain owner or manager must, in each case, decide what he had best do. Those who do not consider that medicinal drinks have any place on the fountain menu point out that taking medicine is never a pleasant thing and that the sight of a person taking medicine may take the keen edge off one's appetite. The contortions of a man struggling with a dose of castor oil, for example, would not tend to increase the gustatory delight of a young lady eating a sundae. But notwithstanding these possible objections, there are many fountains which do no inconsiderable business in "bracers," "headache cures," "salts," etc.

Mineral waters and specialty beverages like kumyss are standard fountain products throughout the trade and no objections can be advanced against their sale.

SPECIALTY BEVERAGES

Ginger Ale

The ale is more brilliant if the syrup is used on the day it is made.

To make a temporary filter, take a large tub, perfectly clean and sweet, having a faucet at the bottom; over the top of the tub stretch a clean, wet, cotton cloth, firmly secured in position by a cord around the outside of the tub; press the cloth down in the center firmly with the hand, and lay on it a large No. 80 size filter paper. With a long-handled dipper or ladle pour the mixture on the center of the filter until it is full. Draw from the tub the first run, and if not clear, return it to the mixture, and again pass through the filter.

The filter when set can be used for several lots.

The filter tub should be scalded after use to keep it sweet.

Tin-lined copper tanks are preferable to tubs for mixing and filtering.

Acid and color must not be added until after filtering.

The best way to use color is to mix a pint of color and a pint of hot water, and filter. Use one-fourth ounce to the gallon.

Fruit acid is made as follows:

Citric acid	4	ounces
Boiling water	8	ounces

Dissolve thoroughly, and strain through a flannel cloth. Keep the acid solution in a glass or stone bottle or jug, well corked. Prepare in small quantities, as the solution will deteriorate if kept too long.

The same ginger ale does not suit all localities. To make the beverage stronger use more extract; if sweeter, use more sugar; if dryer, use more acid. Stick to the method of manipulation. The quality depends to a great degree on the method.

Ginger Ale (to Charge in Fountain)

Place in a suitable fountain 1½ gallons of any ginger ale syrup and water enough to make 10 gallons, and charge with gas to a pressure of 100 pounds. To be drawn from the apparatus in the manner of soda water, but without syrup.

The beverage can be dispensed more readily from a beer pitcher (made to draw from the bottom) by use of which the tumbler is partially filled with solid beverage, and the remainder drawn directly into the tumbler.

Hop Beer

Hops	6	ounces

Ginger, bruised	1	ounce
Molasses	½	gallon
Water		sufficient

Pour 1 gallon water on the mixed hops and ginger, heat to boiling and boil for half an hour, strain and add water through the strainer to make the liquid measure one gallon. To the latter add the molasses, about half pound of bread which has previously been well browned, dried and reduced to a coarse powder, and a pint of brewer's yeast or a cake of compressed yeast. Put the whole in a warm place until fermentation ceases, then draw off the clear liquid, put into bottles or a jug or a keg, and keep in a cool place.

Hop Beer

Burdock root, bruised	8	ounces
Essence of sassafras	2	fluid drams
Hops	1½	ounces
Corn meal, roasted brown	4	ounces
Molasses and water, of each		sufficient

Boil the hops, corn and burdock (if latter is used) with 1½ gallons of water for half an hour, strain and add enough water through strainer to make 1½ gallons, add the molasses (and essence), using enough of the latter to make the mixture palatable but not too sweet, add the yeast, and ferment like the preceding.

Old Fashioned Ginger Pop

Boil 2 ounces of best white Jamaica ginger, bruised, in 6 quarts of soft water; strain and add 1 ounce of cream tartar and 1 pound of sugar. Put on the fire and stir until the sugar is dissolved, then pour into an earthen jar and add 2 drams of tartaric acid and the grated rind of one lemon. Let cool down to the surrounding temperature, add 1 ounce of fresh yeast, stir well and bottle at once, tying the corks down firmly. The "pop" will be ready for use in two or three days if the weather is warm, or if kept in a warm place.

Old Fashioned Ginger Beer

Boiling water	2	gallons
Sugar	2	pounds
Cream of tartar	2	ounces
Ginger root	2	ounces
Lemon (sliced)	1	ounce

Let the ingredients stand until lukewarm, then put into a stone jar, add a large slice of stale bread and two cakes of compressed yeast. Allow to remain over-night in a warm place. Strain and bottle, filling bottles only two-thirds full and fasten corks. Bottles with patent corks are best. In from three to four days the ginger pop will be ready for use.

Kumyss

"Kumyss" is a liquor originally prepared by the Tartars from the milk of mares, but recently imitated with cow's milk to a great extent. It is said to be prepared in Tartary by putting the mare's milk in a tall vessel, while warm adding kumyss, 1 part for every 10 of milk, stirring thoroughly every few minutes, and in three or four hours taking out and bottling in champagne bottles. The National Formulary contains a formula for kumyss which may be recommended.

Another formula contributed to *The Pharmaceutical Era* some years ago is as follows:

Fresh milk	12	ounces
Water	4	ounces
Brown sugar	2½	drams
Compressed yeast	24	grains
Milk sugar	3	drams

Dissolve the milk sugar in the water, add to the milk, rub the yeast and brown sugar down in a mortar with a little of the mixture, then strain into the other portion.

In the manufacture of kumyss strong bottles should be used, champagne bottles being the best. The corks should fit very tightly; in fact, it is almost necessary that a bottling machine should be employed for the purpose, and once the cork is properly fixed it should be wired down. Many failures have been reported because the corks did not fit properly, the result being that the carbonic gas escaped as formed, leaving a worthless preparation. It is further necessary to keep the preparation at a moderate temperature, and to insure the article being properly finished. The bottles are to be gently shaken each day for about 10 minutes to prevent the clotting of the casein. It is well to take the precaution of rolling a cloth around the bottle during the shaking process, as the amount of gas generated is great, and should the bottle be of thin glass or contain a flaw it may give way. Some few days elapse before the fermentation passes into the acid stage, and when this has taken place the preparation is much thicker. When this stage is reached the kumyss is ready to be used.

Kumyss (Russian)

Sweet milk	7	fluid ounces
Yeast (see below)	1	fluid ounce
Water	4	fluid ounces
Sugar	½	ounce

Take 1 cake of yeast and dissolve in 1 pint of water. Take 1 ounce of the solution, place in a bottle with the other ingredients, cork tight and tie with string, sealing top of bottle with wax. Keep in temperature of 75 to 80 degrees until it separates, which takes 4 to 8 hours. Then shake bottle well and put in ice box for 48 hours, when it is ready for use. It may be sold at 10 or 15 cents and can be called Russian or Turkish Kumyss.

Anti-Brain Storm

Wine of pepsin, N.F.	8	fluid ounces
Comp. elixir celery, N.F.	6	fluid ounces
Syrup of orange, fresh	32	fluid ounces
Syrup of raspberry	16	fluid ounces
Syrup of pineapple	8	fluid ounces

Mix, place 2 ounces in a glass one-third full of shaved ice and fill with carbonated water. Charge 5 cents.

Royal Grape

One ounce grape syrup, 2 ounces grape juice, sufficient carbonated water to fill glass. Price, 5 cents for 8-ounce glass.

Pineapple Tonic

Pineapple syrup	6	ounces
Elixir of Lactated Pepsin	4	ounces
Syrup, to make	1	quart

Good, healthful stomach drink. Dispense 1½ ounces in an 8-ounce glass, fill with soda, and charge 5 cents.

Pep-pho

Make a syrup of 60 grains pure pepsin, 1 dram of solution acid phosphates, 2 ounces water, 1 pint vanilla syrup, and raspberry syrup enough to make 2 pints. Dissolve the pepsin in the acid solution mixed with the water and add the remaining ingredients. Serve 1½ ounces in an 8-ounce glass and charge 5 cents.

Lime Juice and Pepsin

To half gallon of lime syrup add 8 ounces of essence of pepsin and mix thoroughly. This may also be served by adding a few dashes of lime juice to any pepsin syrup. It is a fine after-dinner drink and thought by some to be much preferable to plain pepsin as a digestant. Serve 1½ ounces in an 8-ounce glass. Charge 5 cents.

Cherry Pep

Tame cherry syrup	21	ounces
Concentrated syrup	11	ounces
Essence pepsin	40	drops
Simple syrup, to make	1	gallon

Dispense 1½ ounces in an 8-ounce glass, fill with soda and charge 5 cents.

Milk and Seltzer

In serving this drink, which is strictly "temperance," half fill the glass with seltzer water, and the rest with milk. This order of procedure is necessary to avoid the excessive formation of foam, which would cause delay in serving. Use a medium-sized glass (10-ounce). Charge 5 cents.

Mineral Milk

Draw 6 ounces plain carbonated water into 8-ounce tumbler; fill with plain sweet cream; stir and serve.

Artificial Kissengen

Potassium chloride	160	grains
Sodium chloride	3390	grains
Magnesium sulphate (anhydrous)	560	grains
Sodium bicarbonate	1015	grains

Mix intimately by trituration, and dissolve in—

Pure water, gradually added	10	gallons

Filter and charge to 100 pounds pressure.

The above is a standard formula, but the soda man may find it better to buy his salts already prepared by a reliable drug house; not so expensive and better results obtained. Carbonation at 150 pounds pressure may give a more satisfactory product than at 100 pounds.

Bromo-Fruit

Bromo seltzer	a	dose
Fruit (any flavor) syrup	½	ounce

Use 2 glasses to mix.

Castor Oil—To Serve

One small ounce concentrated sarsaparilla syrup, 1 ounce castor oil. Fill glass with carbonated water and serve.

Use fine stream on inside of glass first, then add the sarsaparlla syrup and next the oil. .Fill glass two-thirds full with fine stream, directed to center of contents. Drink at once.

Orangeade is another good flavor to disguise the taste of castor oil.

(6) Mixed Fancy Drinks

The formulas following cover a lot of miscellaneous drinks, the number of which is not large enough to warrant a division into sections of their own.

A number of the formulas in this department are in the nature of a "glorified soda"—that is, they are of the ice cream soda types in method of mixing and serving, but by the combination of various flavors, fruits, and unusual syrup combinations employed, they graduate out of the staple into the fancy class.

Others in this section are specialty drinks pure and simple, and some of these are deserving of special attention.

The extra fancy ice cream soda possesses certain advertising advantages that one must not overlook. Everyone knows what an ice cream soda is, and the combination of cream, flavor, and charged water is so widely popular that with this fact known the appeal is already made. A fancy soda, therefore, starts with a certain handicap over a drink or delicacy whose composition cannot be guessed by the name.

In this connection it is interesting to note that many expert specialists print on their menus information showing the nature of the ingredients of their offerings. This gives the patron the clue, and avoids the disappointment that may arise in attempting to select a drink or dish by name only and then to discover it contains a flavor or fruit that is distasteful.

FANCY MIXED DRINKS

Chocolate Noir

Chocolate syrup	2	ounces
Plain milk	½	glass
Ice cream	3	spoonfuls

Mix in 12-ounce glass, fill with coarse stream and serve with spoon. Price—10 cents.

Chocolate Mint

Chocolate syrup, 2 ounces, sprig of mint. Crush the mint against side of glass. Add ice cream and fill glass with coarse and fine stream. Price 10 cents.

Frosted Chocolate

Place 2 ounces of chocolate syrup and 2 ounces of cream in a glass, and half fill with carbonated water. Add 1 ounce of vanilla ice cream, then fill the glass with carbonated water. Top off with whipped cream. Sells for 15 cents.

Frozen Chocolate

This is an easily made and a satisfactory chocolate beverage. Shake together 1½ ounces of chocolate syrup and 2 ounces light, sweet cream, or rich milk, with 2 ounces of shaved ice, then add carbonated water to fill a 12-ounce glass. Charge 10 cents.

Koko Creme

For each glass of soda water mix equal parts of chocolate and vanilla syrups and add one tablespoonful of cream. The syrups should be made as follows:

Vanilla—Plain syrup, 1 gallon; extract of vanilla, 4 ounces. Mix.

Chocolate—Powdered chocolate, 8 ounces; granulated sugar, 8 pounds; water, 5 pints. Heat the water to the boiling point, then add 7 pounds of sugar and dissolve. To this solution add the powdered chocolate, previously triturated with the remainder of the sugar. Boil for 10 minutes, stirring constantly with a wooden spoon or paddle, then pass through a wire milk strainer. Chocolate syrup prepared in this manner meets all the requirements for soda fountain use. The flavor is well developed. The syrup is smooth and of proper density, and in warm weather will keep for one week. It should be kept in quart bottles, tightly corked, and shaken when dispensed. (Chas. R. Rhodes.)

Ping Pong

Make an emulsion of 1 ounce of cocoanut oil in 3 ounces of mucilage of acacia; add gradually 3 pints of heavy foam syrup and 1 pint of chocolate syrup. Heavy foam syrup is made as follows: Dissolve 1 gallon of water and 1 ounce of gelatin and 12 pounds of sugar. This drink should be very cold and should contain a generous quantity of ice cream.

Mixed Fruits

Vanilla syrup	1	ounce
Cream	½	ounce
Carbonated water, fine stream	½	glass

Add 2 tablespoonfuls of the mixed fruit, finely cut and thoroughly saturated with simple syrup. Serve with spoon and straws.

Tutti-Frutti

Take small amount of each fruit in season, cut very fine into a dish, adding enough syrup to cover, and let stand for several hours. In serving put 2 tablespoonfuls of the mixture into a 12-ounce glass, add ice cream and carbonated water as in other crushed fruit drinks. Price, 10 cents.

Frou-Frou

Fruit nectar syrup	1	ounce
Peach ice cream	2	ounces

Fill glass two-thirds with carbonated water, add a small amount of shredded pineapple, and top with whipped cream. Price, 10 or 15 cents.

Panama

Strawberry syrup	1	fluid ounce
Vanilla syrup	1	fluid ounce
Ice cream	1	spoonful

Place the ice cream in a 12-ounce glass, add the syrup and fill with carbonated water.

New York Beauty

Strawberry syrup	1	ounce
Plain syrup	1	ounce
Ice cream	1½	ounces

Mix in 12-ounce glass and fill with carbonated water, fine stream.

Allee Samee

Strawberry syrup	¼	ounce
Vanilla syrup	¼	ounce
Rich cream	½	ounce
Powdered sugar	1	teaspoonful

Place in a glass and mix with fine stream carbonated water, filling the glass with coarse stream.

Strawberry Soda de Luxe

Mix 2 ounces of fresh strawberries with an equal weight of powdered sugar and allow to stand all night; in the morning crush the fruit, and use with a No. 12 disherful of ice cream in a large soda glass. Now take an egg, and whip it in a machine to a foamy froth, which add to the fruit and cream mixture, and fill the glass with carbonated water. Top with whipped cream. Sells for 20 cents. The author classes this beverage with the "sodas." Made up in larger quantities than called for in this formula a better flavor may be produced.

Ladies' Choice

Raspberry syrup	2 ounces
Sweet cream	2 ounces
Peach ice cream	2 spoonfuls

Serve with 12-ounce glass like any soda drink with coarse and fine streams of carbonated water. Charge 10 cents.

Almond Sponge

One large spoonful plain ice cream, 1 ounce orgeat syrup. Draw into 12-ounce glass, fill with carbonated water, coarse stream, top with whipped cream and serve with a spoon. This may also be prepared by drawing the same amount of the syrup into a mixing glass, adding a little strawberry syrup, half filling the glass with ice, then filling with milk, shaking thoroughly, straining into a 12-ounce glass, holding the shaker high so as to have a nice foam on the drink, and sprinkling on powdered nutmeg. Price—10 cents.

Maple Frostbite

Maple syrup	1 ounce
Vanilla syrup	½ ounce
Shaved ice	⅓ glassful

Rub the rim of a tall frappe glass with a piece of orange and dip the rim of the glass into powdered sugar, which will adhere to it. Shake the syrup and ice, using a heavy glass and a shaker, pour carefully into the frappe glass so as not to wash off the crusting sugar, and fill to about half an inch of the top with plain soda. Add a slice of orange. Serve with paper napkin and straws. Price—10 cents.

Root Beer Cream Float

Fill 12-ounce glass within an inch of the top with root beer, then float on top with spoon about 2 ounces plain, sweet, rich cream. The Cream Float serves well as a novelty and should be priced at 10 cents.

Southern Sassaparilla

Essence sarsaparilla	4 drams
Burnt sugar	2 drams
Soda foam	2 drams
Syrup enough to make	64 ounces

The essence is made as follows:

Oil of wintergreen	1 ounce
Oil of sassafras	1 ounce
Alcohol enough to make	16 ounces

To serve, dispense 1½ ounces in a 10-ounce glass and fill with soda.

Cream Puff

One-half ounce of ice cream beat up with 1 ounce of orange syrup; then fill the glass with carbonated water, fine stream. An ounce of ice cream is then put in around the top of the glass by using a silver tablespoon. This piles the thick creamy soda up in center. Price—10 cents.

(7) Hot Drinks

Hot drinks, originally introduced to increase the financial returns during the slacker trade of the winter months, particularly before the egg drinks and the shakes became so popular, were undoubtedly the forerunner of the modern luncheonette department. In a way, they may be considered the stepping stone to this more recent development, but because one serves hot drinks it does not of necessity mean that he will turn his attention later to the more elaborate lunch service. It is an axiom that any fountain which is open the year round should serve hot drinks during the cold months. Such drinks are trade winners and they are money makers.

The Soda Fountain has summed up the gist of hot soda success in the following rules that dispensers will find a thoroughly dependable guide:

1.—Have all drinks piping hot.

2.—Serve hot beverages in perfectly clean, unchipped cups or mugs. A woman prefers a cup and saucer any day. The saucer protects her gloves and clothes, affords a rest for the spoon, and is generally more attractive.

3.—Keep spoons in a covered glass dish on the fountain. Have this dish bear the words, "These spoons have been sterilised since being used," and see to it that they are. Keep on hand a sufficient spoon supply to permit this precaution.

4.—Do not allow any hot beverage to be served which is a watery, flavorless, insipid decoction. It will kill your trade. Hold each dispenser up to a certain standard in the serving of every hot drink.

5.—Insist on counters and tables being kept clean—that means so clean that a damp, spotless linen cloth will find no dirt to remove.

6.—See that salt, pepper, and spice shakers are filled and sift freely.

7.—Use the decorated hot soda sets, which are the cup and china tray, where crackers or simple sandwiches are to be served.

8.—Maintain a varied menu so that all tastes may be pleased.

9.—Sweeten hot beverages moderately. Too sweet ones cloy, while more sugar is easily added.

10.—In using malted milk powder, bouillon cubes, beef extract, or other ingredients necessary to dissolve in hot water, see to it that every particle is dissolved. Gummy particles floating on the top or sticking to the china cup, are disgusting. Very hot water is necessary and sufficient manipulation. Neither should be stinted.

11.—Serve napkins with hot soda. Attractive paper ones may be purchased in quantities at negligible cost.

12.—Milk and cream must be absolutely fresh or the heat will cause curdling.

13.—Advertising strips, displays, or newspaper items should be changed almost daily so that the public eye may not become weary and indifferent.

14.—Menus become soiled more readily in winter than in summer. Never use a soiled menu.

15.—Hot chocolate should be cooked thoroughly. Too often it is insufficiently prepared and so has a grainy appearance.

16.—All meat extracts and bouillons should be tested each morning by the head dispenser lest some one of them is off flavor. This is fatal to the trade.

17.—Onion and celery salts are inexpensive and add much to make drinks distinctive in flavor.

18.—Never serve scorched syrups.

19.—Do not over-do the flavoring of any drink.

20.—Be exact in the preparation of syrups, flavor blends, and finished drinks. Only in this way can uniformity be gained.

21.—Never serve a syrup which has begun to ferment. It is a mistaken idea to think this is an economy.

22.—A cold cup or mug will cool a hot drink. Have dishes clean and warm.

23.—If a customer finds fault with a drink, rectify the trouble or give him another without dispute.

24.—Keep wafers, sandwiches, etc., in covered glass jars.

25.—Never permit soiled dishes to remain on a counter or table an instant after the customer has left.

26.—Obtain the catalogues of the leading houses manufacturing hot soda supplies, and do not neglect the advertisements in your favorite trade journal. These are the printed market-places which will travel willingly to your side. What they have to offer is worth finding out. The other man is going to do it and you canot afford to be left behind.

27.—There is no time when hot top dressings are more popular for sundaes or for finishing a hot drink, than in the winter.

28.—A fudge warmer with three compartments will keep the top dressings at just the right temperature to serve.

29.—Purchase only the best of materials, prepare them properly, and serve them right.

30.—Introduce something new from time to time. Variety is the spice of business.

31.—Chili-con-carne bowls, sanitary paper cups served upon request, a new broth, an electric toaster or grill, are inexpensive additions which will attract attention.

32.—Plan early, keep your eye on all the details, balance outgo and income, serve the best, serve it in the most approved way, advertise your service persistently and honestly, and there is no reason why you should not make good money in the hot soda business.

HOT SODA

Hot Bracer

Shaved ice	½ glass
Angostura bitters	5 dashes
Elixir calisaya	2 dashes
Curacoa cordial	4 dashes
Compound tincture gentian	2 dashes
Cherry malt	1 ounce
Phosphate syrup	

Shake well and add soda to fill mug. Salt to season. Serve with wafers and celery. The Hot Bracer may be made up as a stock syrup, using 1½ ounces per service. (Geo. A. Zahn.)

Hot Beef Tea

First make an extract by taking 6 ounces extract of beef, 16 ounces hot water, 5 drams tincture of black pepper. Dissolve the beef extract in the hot water and add the tincture of black pepper. To make the tincture of black pepper, take 2 ounces of whole black pepper, crush it, add 10 ounces alcohol. Steep and filter. To dispense, take 1 ounce of the beef tea extract, dash of cream, dash of salt, and dash of celery salt, and place in mug. Fill up with hot water, stirring with a spoon while filling. Place the salt, pepper and celery salt convenient to the customer, should he wish more of the seasoning.

Hot Beef Tea

Put half a teaspoonful of beef extract into a cup, fill the cup with hot water, stir well, and add salt and pepper to suit.

Hot Boviline

One ounce extract of beef and 2 ounces cream. Add hot water and serve with pepper and salt.

Jersey City Bouillon

Take 10 hot soda serving cups and fill them to the brim with water. The ensuing shrinkage will make just 10 ordinary services of bouillon. Pour the water over one pound of chopped beef, the best you can get. Add two spoonfuls of salt, stir and let stand over night. Do not heat during this period. In the morning place over a slow fire, but do not bring to a boil. Boiling keeps the meat juices in by coagulating the tissues. Slow heating permits the water to pass through.

Chicken Bouillon

Two ounces concentrated chicken and half ounce sweet cream. Stir while adding hot water, after seasoning with a little spice. Price, 10 cents.

Rice Chicken Bouillon

First make a good chicken soup as follows: Take one average sized chicken (not a young or spring chicken), cut into small pieces and add two gallons of cold water, put on a slow fire and cook until the chicken is tender. Strain the liquid and after seasoning to suit the taste, put into the urn and keep piping hot. Now take the chicken meat, cut it into cubes and set aside in a handy place on fountain. This will keep well if placed between damp cloths. Boil or steam a small quantity of rice, which also keep in a handy place on the fountain. In serving place a tablespoonful of rice in a bouillon cup, add a few dice of chicken meat, a very small piece of butter, and then draw on this the chicken bouillon which, if kept inside the urn, will be good and hot. With each cup serve a few nice crisp crackers.

The author states that "it is no trouble to get 15 cents for this bouillon, which should not be served in anything but a good china cup. Throw out the old broken cups and saucers and buy some good china. (H. R. Rowe.)

Hot Mock Turtle Bouillon

Make an extract of mock turtle by taking:

Extract of beef	2 ounces
Concentrated chicken	2 ounces
Clam juice	8 ounces
Hot water	3 pints
Tincture black pepper	1 ounce
Essence of celery	3 drams
Essence of orange peel	1 dram

Mix and dissolve thoroughly. To dispense, take 2 ounces of the mock turtle extract and half ounce sweet cream. Stir while adding the hot water. Serve with spices.

Mock Turtle Broth

Liebig's beef extract	1 ounce
Armour's vigoral	1 ounce
Barley, oatmeal or starch	½ ounce
Gelatin	¼ ounce
Tincture bitter orange peel	3 drams
Tincture of capsicum	18 drops
Lime juice	3 drams
Worcestershire sauce	3 drams
Salt	¾ ounce
Hot water to make	16 ounces

Make a thin paste from the starch or other material; swell the gelatin in cold water; dissolve the beef extract in hot water with the salt; add to the hot mixture the starch paste and softened gelatin and bring all to a boil; strain through a wire strainer; add the flavoring and hot water to finish. Use 1½ ounces of the mixture to a mug.

Clam Bouillon

Be sure the clams are absolutely fresh; pick them over carefully and throw out all which are not plainly alive. Then wash thoroughly in cold water and scrub the shells with a clean brush until they are absolutely clean. Put a peck of clams in a kettle with two quarts of cold water, and steam until the shells open wide. Strain the liquor, allow it to cool and then clear as usual. The clam meats can be used in any manner desired.

Clam Bouillon

As many people are unable to obtain clams in the shell the following recipe is given for bulk clams:

Take two quarts of solid clam meat. With a sharp knife cut off the tough black head, and separate the soft parts from the remainder of the tough portion. Chop both fine but keep separate. To the tough portions—not the black tips—add two quarts of water, a tablespoonful of salt, two stalks of celery cut fine and a dash of cayenne pepper. Simmer slowly for one hour. Then add the soft parts of the clams, previously chopped, and simmer another hour to extract all the juices. Bring to the boiling point and boil briskly for a few minutes. Then cover and place on the back part of the stove and allow it to stand for a while. Strain through clean cheesecloth doubled. Return the contents of the strainer to the kettle and add two quarts of white stock, two quarts of cold water, and the clam liquor strained previously from the clams. Bring to the boiling point again and then strain. It is now ready to serve.

Clamcel

Clam juice, 1½ fluid ounces; add about

half a teaspoonful of celery extract and a small quantity of mixed spices, season to taste; fill mug with hot water and serve.

HOT CLAM CREAM

Concentrated clam juice, any good brand	1½	ounces
Hot milk	2	ounces
Hot water	4	ounces

Serve in a fine china cup and add a pinch of salt and a little white pepper. Clam juice should be transferred to a glass or porcelain container immediately on opening the can.

HOT CLAM JUICE

Clam juice may be served in the proportion of two ounces to an eight-ounce mug, filling the latter with hot water and serving with a spoon; also giving the patron celery salt, salt and pepper cellars and soda crackers. The clam juice is served more acceptably by adding an ounce of milk, better yet by using half water and half milk, and still better by using all hot milk. A small amount of butter causes a marked improvement. Clam juice, like beef tea, must always be served hot. It spoils very readily and must be kept on ice. If a distinction is desired between clam bouillon and clam broth, the latter may be served with a spoonful of butter and the former without it. A fine way to make a distinction is to apply the name "clam juice" to a mixture of clam juice with hot water, "clam bouillon" to a similar mixture with a dash of lemon juice added, and "clam broth" to clam juice mixed with cream or milk. Clam juice with hot water and seasoned well may be known as "clam night cap." "Clam juice cocktail" is made with two ounces of clam juice, two drams of lemon juice and hot water.

SELECT OYSTER BOUILLON

In an 8-ounce bouillon cup put 1 select oyster of medium size and add 1½ ounces of hot water. Then with an oyster fork crush the oyster into small bits until nothing but the skin and hard parts remain. Remove the largest pieces and add 1 ounce of concentrated clam juice, 1 small ladleful of unsweetened whipped cream. Fill the cup with hot water and season with salt, pepper and celery salt. In this formula concentrated oyster juice is not used. Price, 10 cents. (H. Wendell.)

HOT OYSTER JUICE

Fresh juice or liquid taken from the top of a quantity of oysters	1	ounce
Sweet cream	1	tablespoonful

Fill the mug with hot water and add a small piece of fresh butter and season with salt and pepper. (Geo. A. Zahn.)

OYSTER SPICED

Six oysters		
Clam juice	1	ounce

Fill mug with hot water and flavor with salt, pepper or other spices.

CREME TOMATO BOUILLON

First obtain regular tomato bouillon of your choice, there are a number of good ones on the market, or make one like the following:

Tomatoes	1	can
Maggi beef	1	teaspoonful
Cayenne pepper	¼	ounce
Cloves	1	ounce
Bay leaves	1	ounce
Extract of celery	a few drops	
Worcestershire sauce	season to suit	

Strain the above through a fine sieve, bring to a boil, and strain through cheesecloth. Add to this 1½ quarts of water, and the mixture is ready to use. A little sodium bicarbonate will prevent curdling.

Use 1 to 2 ounces to the regular bouillon cup; to this add a teaspoonful of whipped cream, 1 teaspoonful powdered cracker dust, season to suit and serve with long thin crisp crackers. If you have an urn with a top, keep your crackers in it and you will be able to serve hot crisp crackers at all times.

The author says that "broken crackers should never be served at the fountain, and as they are too good to throw away just run them through the fine plate of the food chopper and you will have the very best cracker dust to use for cream tomato bouillon. This drink sells for 10 cents and is very quickly and easily made. Try it and see how soon the trade will take notice." (H. R. Rowe.)

HOT CREAM TOMATO BOUILLON

Into a small cooker put one can of any good brand of tomato soup, one bottle of catsup, one-fourth ounce of cayenne pepper, a piece of butter the size of an egg, and season with salt and pepper. Lastly, put in one-fourth of an ounce of fluid extract of celery seed and bring the mixture to a boil. The addition of the celery gives the cocktail a delicious and characteristic flavor. Strain the mixture and it is ready to serve.

HOT TOMATO BISQUE

Usual amount of tomato extract, spoonful malted milk, little cream, hot water.

RICE TOMATO BOUILLON

First boil a small quantity of rice and keep it in a convenient place on the fountain. Put the regular amount of prepared tomato in a bouillon cup, add a teaspoonful of the rice, fill the cup with hot water, season to suit, and serve with an olive, a small piece of celery and a couple of saltine wafers. Price, 10 or 15 cents.

TOMATO BOUILLON

Use 1 ounce tomato bouillon (any good brand) in a 7-ounce cup of hot water, season with celery salt and serve. By adding a small amount of rich, sweet cream you have "tomato puree."

TOMATO BOUILLON

Tomatoes	1	quart
Arrowroot	2	ounces
Extract of beef	1	ounce
Bay leaves	½	ounce
Cloves	½	ounce
Red pepper	¼	ounce
Worcestershire sauce, to flavor		

Remove the seeds from the tomatoes by rubbing through a strainer; add the other ingredients and half gallon of hot water; bring to a boil and strain.

PUREE OF TOMATO

Pour 2 ounces of tomato soup into a cup, add half ounce of sweet cream, fill with boiling water, and season with salt, pepper and celery salt.

HOT CELERY BOUILLON

Clam juice	¼	ounce
Beef extract	¼	ounce
Cream	1	ounce
Essence of celery	4	dashes

Stir while adding hot water. Serve with spices.

HOT CELERY WITH CREAM

To one teaspoonful of beef extract add one ounce of sweet cream and season with extract of celery. Celery salt may be used if desired. Serve in an eight-ounce mug, filling same with hot water. Serve with salted wafers. (George A. Zahn.)

DELMONICO NOGG

Extract of beef	1	ounce or less
Cream	1	ounce
Extract of celery	1	dram
Egg	1	

Beat egg up with the cream. Mix thoroughly with mixing spoon and stir while adding the hot water. Top off with grated cinnamon. Price—Eight or 10-ounce mug, 10 cents.

HOT LACTATED BEEF

Aromatic extract of beef	1	teaspoonful
Fresh cream	1	teaspoonful
Extract of celery	1	dash
Hot water	1	cupful

Season with pepper and salt.

HOT STUFF

Beef extract	½	teaspoonful
Clam bouillon	1	teaspoonful
Sweet cream	1	tablespoonful
Port wine	1	teaspoonful

Place in mug which fill with boiling water. Serve with salt, pepper and celery salt.

ROASTER

Use 1 ounce beef bouillon in cup of hot water; season with salt, pepper and celery salt; add 1 dash sherry wine; top with whipped cream.

WALL STREET'S HOT FAVORITE

Liquid beef extract	1	ounce
Egg	1	
Essence of celery	1	dash
Cream	1	ounce

Beat or stir the egg well with the cream; add the extract of beef and celery and fill the cup with hot water; serve with powdered nutmeg and cinnamon on the side. Charge 10 or 15 cents. (H. T. Schultz.)

DOUBLE B BOUILLON

Extract of beef	½	ounce
Extract tomato bouillon	1	ounce

Place in cup, fill with hot milk and serve with graham wafers, salt and pepper. A bit of sodium bicarbonate will prevent curdling.

CURRIED BOUILLON

Extract of beef (any good kind)	4	drams
Salt	1	dram
Water	1	pint

Dissolve and mix; bottle the product and keep on ice. To dispense, pour 1 ounce into mug, add a pinch of curry, stir, and fill with hot water, again stirring before serving.

AROMATIC BEEF BOUILLON

Aromatic extract of beef, 1 teaspoonful; extract of celery and pepper, 10 drops; place in mug and fill with hot water.

BLIZZARD BREAKER

Extract of beef	1	teaspoonful
Tomato catsup	½	fluid ounce
Hot water	6	ounces

Season to taste.

HOT KLONDIKE

Clam juice	2	drams
Liquid beef	2	drams
Cream	1	ounce
Essence of celery	4	dashes
Extract of spices	1	dash

Place all in cup and fill with hot water.

HOT PRIZE

Clam juice	2	ounces
Lemon juice	2	dashes
Celery salt		sufficient
Hot water	6	ounces

PICKLED CLAM BROTH

Ginger syrup	1	ounce
Cream	1	ounce
Clam bouillon	1	ounce

Fill mug with hot water and add a dash of celery salt.

TOMATO CLAM BROTH

Clam juice	1	ounce
Tomato catsup	¼	ounce
Butter	¼	ounce
Cream		dash

Add hot water, stirring well, and serve with spices.

HOT CHOCOLATE

Take one heaping teaspoonful of rich chocolate powder, dissolve it in a little hot water, then fill the cup with hot milk and top off with whipped cream. Serve with saltines or flake wafers.

FINISHED HOT CHOCOLATE

To be served from a hot apparatus having large cans. Two quarts water, 2 pounds sugar, 1 quart milk, 1 pound powdered chocolate, or 1 quart cream chocolate. Put the water into a can over a slow fire, let it come almost to a boil, add the chocolate, milk and sugar, and simmer for five minutes; pour into the urn and keep it hot. To serve, draw this chocolate into cup, add more sugar if desired, and top with whipped cream. Charge 10 cents.

HASTY HOT CHOCOLATE

This syrup is quickly and easily prepared. Take 16 ounces of powdered cocoa (any good brand), five pints of water, six pounds of granulated sugar and one-half ounce of vanilla extract. Reduce the cocoa to a smooth paste with a little warm water. Place the water over the fire in a suitable container and when it reaches the boiling point add the cocoa paste. Allow to boil for five minutes, stirring carefully meanwhile to prevent burning. Then strain and add the vanilla extract. This is a practical formula and has been used with success.

HOT CHOCOLATE

Sugar	4	pounds
Cocoa	2	pounds
Water	2	gallons
Milk	3	gallons

This formula makes about 6½ gallons of hot chocolate.

HOT CHOCOLATE

This formula makes "a good hot chocolate":

Cocoa	3	pounds
Sugar	10	pounds
Water	8	quarts
Vanilla	1	ounce

To the above chocolate stock add 25 quarts of milk. The formula may be cut and the milk added in proportion—approximately 10 quarts of milk to a gallon of stock. The formula as given makes close to two gallons of stock. Ten cents per cup is the proper price.

A "cheaper" formula, based upon the above, is as follows:

Cut the quantity of milk used in half and substitute in place thereof one-half condensed milk and one-half water. Cut the cocoa to 12 ounces. Add the remaining ingredients in the same proportion as above.

HOT CHOCOLATE

Sugar	5	pounds
Cocoa	3½	pounds
Water	2	gallons
Milk	6	gallons

This formula was used for three and a half years with great success. It costs about 22 cents per gallon and makes up approximately 10 gallons.

HOT CHOCOLATE

Cocoa (French)	1	pound
Sugar	3	pounds
Heavy cream	1	quart
Milk	11	quarts

This formula makes up nearly 3½ gallons and costs about 3 1/3 cents per cup. With the whipped cream, cakes, etc., the cost per cup is about 4½ cents. This is, of course, a 10-cent product. (F. V. Edmonds.)

HOT CHOCOLATE

Cocoa	2½	pounds
Water	1	gallon
Condensed milk	4	quarts
Granulated sugar	4	pounds
Salt		sufficient

This hot chocolate should be served "straight" and not diluted. It may prove advantageous in this formula to reduce the amount of cocoa to two pounds.

HOT CHOCOLATE

Cocoa	1	pound
Sugar	2	pounds

Mix thoroughly and keep in covered container. At time of serving put two teaspoonfuls of mixture in cup, fill with boiling water, stir thoroughly and serve with whipped cream. Evaporated milk or standard cream may be added. Ten cents should be the price for this hot chocolate.

HOT CHOCOLATE

Boiling water	5	gallons
Cocoa	5	pounds
Salt	½	ounce
Milk	5	gallons
Sugar	20	pounds

This syrup may be served by adding hot milk or hot water, preferably the former—two ounces of the syrup to the cup. Charge 10 cents per service.

HOT CHOCOLATE

Take of a good soluble cocoa, 3½ ounces; 2 pints water, 40 ounces granulated sugar, 4 drams vanilla extract. Heat the water to boiling, stir in the cocoa, gradually added; add the sugar, when latter is dissolved, strain and add the extract.

HOT CHOCOLATE

Eight ounces chocolate, 4 ounces granulated sugar, 28 ounces boiling water, chocolate syrup enough to make a gallon. Select a rich brand of chocolate. Grate or scrape fine and triturate with the sugar; then in a large warm mortar form a paste by trituration, gradually adding 18 ounces of boiling water; transfer to a porcelain vessel, heat slowly, stirring well, gradually add the remainder of the water, bring to a boil and boil for five or six minutes, stirring constantly; stir for some time after removing from the fire, then bring to a boil again and boil for one minute. By this means separation of cacao butter is prevented, and the mixture does not require straining, but simply skimming. Add the syrup and flavor with vanilla extract or other flavoring. Care must be exercised to make a smooth paste in the beginning, and to avoid scorching at the last. A quantity of the chocolate may be kept on hand, in grated or scraped form, mixed with the proper amount of sugar. In serving use 1½ ounces of the syrup, add an ounce of cream, fill the mug with hot water, top with whipped cream, and serve with crackers and a spoon.

HOT CHOCOLATE

Four ounces powdered chocolate, 2⅗ pints water, 2½ pounds sugar, 2 drams vanilla extract. Mix the chocolate and starch by trituration with part of the water, pour on the remainder of the water in a boiling condition, stir well and heat to boiling until the starch is cooked, stirring constantly; add the sugar, stir until dissolved, add the vanilla extract. Serve like the preceding.

HOT CHOCOLATE

Cocoa	2	pounds
Lukewarm water	1½	gallons
Milk	5	gallons
Sugar	3	pounds

Stir cocoa into water until latter boils; boil five minutes; then add sugar and milk; bring again to boiling point, and keep ready for service at temperature of about 140° F.

HOT CHOCOLATE

Bitter choc. (ground)	12	ounces
Warm water	1	pint
Granulated sugar	24	ounces
Sweet milk	2	gallons
Extract vanilla	1	ounce
Salt		pinch

Add the chocolate to the warm water, and heat to boiling point, stirring to produce a smooth paste. Dissolve the sugar in the milk, then add to the paste. Then add vanilla flavoring and the salt. (Raymond Wells.)

HOT CHOCOLATE

Cocoa	18	ounces
Sugar	4	pounds

Milk	2	quarts
Vanilla extract	1½	ounces
Glycerin	1½	ounces
Cocoa butter	1	ounce

Warm the milk, add the sugar and cocoa previously mixed. Bring to a boil, add the cocoa butter and stir. Take from the fire, add the glycerin and stir again. When cool add the vanilla. Add four ounces of condensed milk to 28 ounces of the syrup. Serve 1½ ounces to an eight-ounce mug, which fill with hot water. Top with whipped cream and serve with crackers.

Hot Chocolate

Good cocoa	1½	pounds
Water	7	quarts
Sugar	2½	pounds
Extract of vanilla	½	ounce
Pure cream	3	pints

Have the water *boiling*, and then with one quart of the water make a paste of the chocolate. Then smooth the paste with two or more quarts of water and let it come to a boil. Then add the sugar, the vanilla and the ice cream and let it come to a boil again. Strain it before putting in your dispensing urn. (Sam. Schusterman)

Hot Chocolate

Three pounds powdered Dutch cocoa, ½ gallon water, 2 pints cream, 5 ounces tincture of vanilla, 1 teaspoonful salt, and enough simple syrup to make 1 gallon. This syrup must be used in a day or it will sour. It may prove advantageous to reduce the quantity of cocoa.

Hot Chocolate

Powdered cocoa, 1 pound; boiling water, 1 pint; syrup (12 pounds of sugar to gallon of water), 7 pints. Put the cocoa in a double boiler, add 1 pint of syrup, rub into a smooth paste, add the pint of boiling water, place over fire and bring to a boil. Remove from fire, add the balance of the syrup and strain. When cold add I ounce of vanilla extract, if desired.

Hot Chocolate

Cocoa, 5 ounces; sugar, 7 ounces; water, 1 quart; milk, 2 quarts; put into a suitable vessel over the fire, bring to a boil, then place in the urn. This formula may be improved by the addition of more cocoa.

Hot Chocolate Paste

Cocoa	¼	pound
Fine granulated sugar	½	pound
Evaporated milk	½	cupful
Water	½	cupful

Mix the cocoa and the milk smoothly, rubbing out all lumps. Add the water and bring slowly to the boiling point, stirring all the time. Boil steadily for four or five minutes. Keep in covered container. In serving place small dipperful in cup of boiling water. Add cream to taste.

Hot Chocolate Paste

Cocoa	¼	pound
Fine granulated sugar	½	pound
Lukewarm water	1	cupful

Mix as above, and proceed exactly as outlined in the preceding formula. Serve about an ounce to a cup and fill cup with hot milk and water.

Hot Cocoa

Cocoa, 8 ounces; corn starch, 1 ounce; sugar, 5 pounds; water, 5 pints. Dissolve the corn starch in water brought to a boil and add the cocoa previously mixed with sugar. Place 1 ounce of the mixture in a cup, fill with hot water and top off with whipped cream.

Hot Cocoa

Place in a double boiler three pounds of powdered sugar, one pound of best cocoa and after mixing well add two quarts of water. Cook for one hour. When ready, take off fire and add three pints of unsweetened condensed milk, stir and mix well and keep in cold place until used. To dispense, take one ounce of this syrup in a seven-ounce mug and fill with hot water, top off with whipped cream and serve. Price 10 cents. (Theodore Louvis)

Improved Hot Chocolate

Powdered cocoa, best, 8 ounces; water, 4 pints; sugar, 2½ pounds; place the cocoa in double boiler, adding the water slowly. Strain the syrup through a cheesecloth to remove all lumps.

Inwright's Chocolate (Hot)

Milk	3½	gallons
Water	3	gallons
Powdered chocolate	1	pound
Sugar		sufficient

Flavor with vanilla.

Louvis Hot Chocolate

Best cocoa	1	pound
Powdered sugar	3	pounds
Water	2	quarts
Unsweetened cond. milk	3	pints

Mix the cocoa and sugar, add the water, cook for one hour in a double boiler. Take off the fire and add condensed milk, stir well and set aside for use. Dispense one ounce of this syrup in a seven-ounce mug, fill with boiling water, top with whipped cream and serve.

Moore's Chocolate Milk

Chocolate	1	pound
Water	6	quarts
Milk	4	quarts
Vanilla	1	dram
Sugar		q. s.

"Real" Chocolate (Hot)

Cocoa (any good brand)	1	pound
Sugar	2½	pounds
Milk	10	quarts

Boil the milk in a double boiler; add the cocoa and the sugar which have been mixed together. Let the mixture come to a *good* boil. Serve with saltines, 20 cups to the gallon. Charge 10 cents per cup.

Hot Cocoa Royals

Chocolate paste	1	ounce
Grated cocoanut	½	ounce
White of egg	1	

Mix thoroughly with a spoon, then add boiling water, stir well, and top off with whipped cream and a dash of grated cinnamon if desired.

Benedict's Hot Persian Chocolate

Two spoonfuls of cocoa, a shake of cinnamon, hot milk; top off with whipped cream; serve with wafers.

Aviation Hot Chocolate

Chocolate syrup	1½	ounces
Egg	1	
Sweet cream	¼	ounce

Mix the syrup, cream and egg together in an egg shaker as in dispensing cold egg drinks, add hot water, and mix by pouring back and forth several times from shaker to mug, or break the egg into the shaker, beat with a spoon, add the syrup, cream and sufficient hot water, stirring constantly all the while. Strain into a mug and serve with whipped cream.

Hot Swiss Chocolate

Malted milk	1	spoonful
Sweet cream	1	ounce
Chocolate paste (see formula below)	½	ounce

Add hot water to fill the cup and top off with whipped cream.

Paste for Hot Chocolate

Pure chocolate	½	pound
Plain syrup, enough to make a paste		
Evaporated milk	½	pint
Vanilla extract	½	ounce

(Smoot Drug Co.)

Hot Swiss Chocolate

Malted milk	1	spoonful
Sweet cream	1	ounce
Chocolate paste	½	ounce

Add hot water to fill the cup and top off with whipped cream. Chocolate paste is made as follows:

Pure chocolate	½	pound
Water, enough to make a paste		
Evaporated milk	½	ounce
Extract of vanilla	½	ounce

Hot Ice Cream Chocolate

Hot chocolate, very hot, with a spoonful of ice cream to top it off. Charge 10 cents.

Celery Cocoa

Chocolate paste	1	ounce
Cream	1	ounce
Essence of celery	4	dashes

Stir while filling up with hot water. Top off with whipped cream and serve with celery salt.

Hot Coffee Punch

Egg	1	
Extract of mocha coffee	1	dessertspoonful
Lime juice	1	teaspoonful

Dispense in an 8-ounce glass. Prepare like hot egg checkerberry.

Coffee Bouquet

Strawberry syrup	¾	ounce
Vanilla syrup	¾	ounce
Egg	1	
Sweet cream	1	ounce

Shake well and fill mug with hot coffee; top off with whipped cream.

Hot Vanilla Creme

Vanilla syrup	1	ounce
White of 1 egg		
Cream	1	ounce

Shake well; add whipped cream and fill cup with hot water. Cream in hot drinks is often replaced by ice cream where ice cream soda is served all winter.

Oloroso

Pistache or almond syrup	1	ounce
Egg cream syrup	1	ounce
Cream	½	ounce
Aromatic tincture, N.F.	15	minims

Mix in soda mug and fill with hot water, stirring well. Top off with cinnamon.

Hot Caramel

Cream	1	ounce
Chocolate paste	½	ounce
Vanilla syrup	½	ounce
Hot coffee	2	drams
Egg	1	

Beat up egg in cream, add paste, then syrup and coffee, filling with hot water, fine stream, stirring meanwhile. Serve with grated nutmeg or cinnamon. Price—10-ounce glass, 15 cents.

Hot Mint

Milk	2	ounces
Essence of mint	10	drops
Sugar	2	teaspoonfuls

Fill mug with hot water, top with whipped cream and serve with nutmeg.

Birch Tea (hot)

Birch beer syrup	1	ounce
Hot water to fill mug		

Birch beer syrup for the above may be made as follows:

Extract of birch	6	ounces
Caramel		sufficient
Soda foam	1	ounce
Syrup, enough to make	1	gallon

Hot Malted Milk

Add to several teaspoonfuls cream in a mug two tablespoonfuls malted milk and make a paste. Then add hot water or milk to fill, gradually stirring while doing this. Season with salt and pepper, or with celery salt and serve with soda crackers.

Hot Malted Special

Malted milk may be added to a mixture of hot coffee and chocolate and makes a very fine beverage.

Malted Milk Coffee

Coffee syrup	1	ounce
Malted milk powd.	½	ounce

Mix the powder thoroughly with the syrup to reduce the lumps, fill up with hot water and stir again. Top off with whipped cream. Serve with salt and celery salt.

Hot Malted Coffee

Malted milk	1	ounce
Coffee extract	1	dram
Cream	1	ounce

Reduce the lumps with a spoon. Stir briskly while adding hot water.

Hot Malted Milk Coffee

Malted milk	1	teaspoonful
Coffee, ground	1	teaspoonful
Hot water to fill cup		
Sugar, to sweeten as desired.		

Mix the malted milk, coffee and water with vigorous stirring, and boil for three minutes. Add the sugar and serve hot, using a fine strainer. Or, 1 to 4 teaspoonfuls of malted milk are placed in a cup and ordinary hot coffee poured directly upon it with constant stirring.

Malted Oysterette

Mix a teaspoonful of malted milk with a little milk, add 1½ ounces oyster juice and season with a little salt. Fill with hot milk, being careful to mash all lumps of the malted milk. Charge 10 cents.

Malted Tomato-Beef

Into a well-heated hot-soda mug put a teaspoonful of malted milk. Mix to a smooth paste with a little milk. Add one ounce of beef bouillon and one ounce of plain tomato bouillon. Fill mug with hot water. Stir and serve. Charge 10 cents.

Hot Malted Milk Bracer

Place in an electric mixer:

Orange syrup	½	ounce
Sweet cream	1	ounce
Malted milk	2	soda spoonfuls
Hot milk	8	ounces

Mix for about five seconds and pour into a 12-ounce glass; then top with whipped cream and nutmeg. Can be sold for 10 cents. The author states that the sale of this beverage has increased his malted milk trade 50 per cent. Price—12-ounce glass, 10 cents. (E. J. Harshman.)

Hot Malted Ginger

One level tablespoonful malted milk mixed to a paste with cream. One ounce ginger syrup. Hot water to fill cup.

Hot Egg Drinks

The hot egg drink is delicious if it be nicely prepared, but it certainly requires skill. An egg may be served as a phosphate, as an egg chocolate or coffee. Prepare same as for cold, after shaking strain and draw off 1 glass of hot water to be sure the water is very hot, then add the water slowly, stirring constantly so that the egg will not separate and lump up.

Hot Egg Bouillon

Egg	1	
Beef tea extract	1	ounce or less
Dairy butter	½	spoonful

Beat up the egg, add several ounces hot water and stir until the butter is dissolved. Fill up with hot water. Serve in an 8- or 10-ounce mug.

Hot Egg Bouillon

Shake the egg and extract in a shaker, add the water, and mix by pouring back and forth several times from shaker to mug.

Parisian Consomme

Extract of beef	1	ounce
Egg	1	
Butter, a small quantity		

Mix in mug with several ounces of hot water, stirring until the butter has dissolved. Then fill up with hot water and serve with celery salt.

Imperatrice Bouillon

Tomato bouillon	½	ounce
Liquid extract of beef	½	ounce
Egg	1	
Extract of celery	1	dash
Mixed spices, to season		

Stir the extracts, egg and seasoning together, add the hot water, strain and serve. Or, shake together in a mixer and strain. Charge 10 cents.

Hot Beef Egg

Break fresh egg into mixing glass with a little water and shake well. Draw hot water to fill, then take a bouillon cup and add half ounce of beef tea extract or a cube of the same. Serve with graham wafers and salt. Price—Eight or 10-ounces, 10 cents. (Geo. A. Zahn.)

Epicurean Lunch

Sweet cream	1	ounce
Beef extract	1	ounce
Extract of celery	3	dashes
Egg	1	

Break the egg by shaking and mix thoroughly while pouring in hot water enough to fill an 8-ounce mug. Float a teaspoonful of whipped cream on top, and sprinkle with nutmeg.

Sky Scraper

Break 1 fresh egg into a mixing glass without ice, but containing a very little hot water, and shake well. Pour into a hot soda mug, add half ounce beef tea extract, and fill cup with hot water; serve with two graham wafers, pepper and salt.

Hot Malted Milk with Egg

One ounce of malted milk. Put into a mug and add a little hot water to dissolve the powder. Then break an egg and beat it with a spoon, stir into malted milk, add hot milk or hot water, and flavor with either chocolate or vanilla. Charge 15 cents. (Geo. A. Zahn.)

Hot Egg Chocolate

Egg	1	
Chocolate syrup	1¼	ounces
Sweet cream	1	teaspoonful

Shake well, strain and add one cupful hot water and one tablespoon whipped cream. Serve in a 10-ounce glass.

Hot Egg Chocolate

Chocolate syrup	1	ounce
Egg	1	
Cream	½	ounce

Hot water enough to fill a 10-ounce mug.

Hot Egg Coffee

Extract of Mocha coffee	1	dessertspoonful
Sweet cream	2	teaspoonfuls
Sugar		sufficient

Beat egg, cream and sugar together; add coffee extract and then the hot water. Shake well, strain and add one cupful hot water and one teaspoonful whipped cream. Price—10 ounces, 10 cents.

Egg Coffee

Beat the yolk of one egg, add sugar to sweeten, two ounces of hot cream. Nearly fill cup with hot coffee and fold in the beaten white. Serve at *once*.

Hot Egg Nogg

Break fresh egg into shaker. Shake well and pour into 5-ounce bouillon cup. Flavor with sherry and one teaspoonful of sugar. Sprinkle a little cinnamon before drawing hot milk. Serve in a 10-ounce glass with two 5 o'clock tea cakes.

Hot Egg Cream

One egg, one ounce each of cream and vanilla syrup; shake and add hot milk. Price, 15 cents.

Hot Egg Milk

Two teaspoonfuls sugar, 1 ounce cream, 1 egg, a "touch" of vanilla syrup to improve flavor, hot milk to fill an 8-ounce mug. Prepare like hot egg checkerberry, top with whipped cream and sprinkle with nutmeg. If hot milk is not available, use about 2 ounces of cream, and fill the mug with hot water.

Hot Egg Caramel

Cream	1	ounce
Chocolate paste	½	ounce
Vanilla syrup	½	ounce
Coffee	2	drams
Egg	1	

Mix thoroughly and stir while adding hot water. Serve with grated nutmeg or cinnamon.

Hot Egg Claret

Prepare like the hot egg checkerberry, using claret syrup.

Hot Egg Cherry Blaze

Prepare like hot egg checkerberry, only use cherry syrup and lemon juice in proportions of 1 ounce and 1 dram respectively, instead of the wintergreen or orange syrups. Sprinkling on the beverage a few drops of alcohol and igniting the latter will make it a real blaze.

Hot Egg Checkerberry

Take 1 ounce wintergreen syrup or the same quantity of wintergreen and orange syrups, half and half; 1 egg, half ounce cream, and hot water enough to fill an 8-ounce glass. Mix the syrup, egg and cream together in an egg shaker, add the hot water, and mix all by pouring back and forth several times from shaker to mug. Or, prepare by beating the egg with a spoon, add the syrup and cream, mix all quickly with the spoon and add hot water, stirring constantly, and strain.

Checkerberry Egg

Syrup checkerberry..	1	ounce
Egg	1	
Sol. acid phosphates	½	dram

Mix thoroughly and fill mug with hot water. Top off with nutmeg and cinnamon.

Hot Egg Pineapple

Prepare like hot egg checkerberry, using pineapple syrup.

Hot Egg Lemonade

Prepare like hot egg checkerberry, substituting lemon syrup for the other syrup, adding a small amount of lemon or lime juice and omitting the cream and whipped cream. Charge 15 cents.

Hot Lemon and Egg

Egg	1	
Juice of half lemon		
Sugar	2	teaspoonfuls
Hot water, enough to make	8	ounces

Charge 15 cents.

Hot Lime-Egg-Ade

Egg	1	
Lime juice	1	ounce
Powdered sugar ...	1	spoonful

Mix the egg thoroughly, strain if necessary. Add hot water, stirring while filling. Serve nutmeg and cinnamon.

Hot Egg Lime Fizz

Lime juice	1	ounce
White of 1 egg		
Powdered sugar ...	2	teaspoonfuls

Add hot water and top off with a small spoonful of whipped cream.

Hot Egg Orange

Orange syrup	1½	ounces
Egg	1	
Cream	1	ounce
Hot water, enough to make	8	ounces

Mix the syrup, egg and cream together in an egg shaker, shaking as in making cold egg drinks. Add a little hot water before serving. This drink may be prepared by breaking the egg with a spoon, adding the syrup and cream and mixing quickly with the spoon. Then add the hot water, stirring constantly meanwhile, and strain. (George Zahn.)

Hot Egg Orange

Orange syrup	1 to 1½	ounces
Egg	1	
Cream	½	ounce
Hot water enough to make	10	ounces

Mix the syrup, egg and cream together in an egg shaker as in making cold egg drinks, add the hot water, and mix all by pouring back and forth several times from shaker to mug. Charge 15 cents.

Hot Egg Orangeade

Egg	1	
Juice of half orange		
Powdered sugar	2	teaspoonfuls

Shake well, strain into mug and fill with hot water. Stir and serve with nutmeg.

Hot Egg Orangeade

Egg	1	
Juice of half orange		
Powdered sugar ...	2	teaspoonfuls

Shake well (use electric mixer), strain and add one cup of hot water. Stir and serve with nutmeg. Price—10-ounce glass or mug, 10 cents. (George A. Zahn.)

Hot Egg Ginger

Prepare same as hot egg checkerberry, using ginger syrup.

Hot Golden Fizz

Ko-kola syrup	1	ounce
Yolk of egg........	1	
Bitters	2	dashes

Mix the egg thoroughly with a whirling spoon. Add hot water, stirring while filling. Serve with grated nutmeg and cinnamon.

Hot Egg Punch

Serve in a long, thick soda glass. Take 2 ounces of cream, 2 ounces of hot milk, 1 ounce of plain syrup—or vanilla, one whole egg. Shake the egg with the above ingredients and then add a teaspoonful of Jamaica rum (or enough for the flavor required). Pour from shaker to glass four or five times. After putting glass in holder add hot water, stir; top with whipped cream and nutmeg.

This makes a fine drink when a person is feeble or has been exposed to cold. (Geo. A. Zahn.)

Hot Egg Phosphate

Break fresh egg into shaker and add half ounce pineapple syrup, half ounce orange syrup, 1 dash solution of acid phosphate. Shake, without ice, and pour into bouillon cup. Draw cup full of hot water, sprinkle a touch of cinnamon and serve with Long Branch wafers. Serve in a 10-ounce glass.

Hot Egg Phosphate

Lemon syrup	1 to 1½	ounces
Sol. acid phosphate	1	dash
Egg	1	
Hot water to make	8	ounces
Lemon syrup	2	ounces

Hot egg phosphate may also be made as follows:

Egg	1	
Sol. acid phosphate.	⅛	ounce

Mix in a glass and shake together thoroughly; pour into another glass, heated previously, and slowly draw full of hot water; season with nutmeg. Serve in a 10- or 12-ounce glass (heavy) and charge 10 cents.

Hot Egg Phosphate

Break a fresh egg into a shaker; add a small piece of ice to break the yolk of the egg in shaking; then add one ounce of strong lemon syrup and one ounce of strong orange syrup. Shake thoroughly, then pour into hot-soda mug and add hot water. Top with grated nutmeg and a dash of phosphate. Serve in a 10-ounce mug or glass and charge 10 cents. (Geo. A. Zahn.)

Hot Egg Phosphate

Lemon juice, sugar to sweeten, 1 fresh egg, 1 dram solution of acid phosphate, 1 ounce cold water; put into a combination shaker and shake thoroughly; strain into a cup, then fill with hot water; top with nutmeg. Price—10- or 12-ounce glass, 15 cents.

Hot Egg Phosphate

Egg	1	
Lemon juice	3	teaspoonfuls
Soluble extract lemon	10	drops
Confectioners' sugar	3 large	teaspoonfuls
Sol. acid phosphate..	1	dash
Prepared spice		small quantity

Place all in a combination shaker and thoroughly shake; then strain through julep strainer into hot soda cup; to this add two large tablespoonfuls of whipped cream. Draw hot water into side of cup, and stir bottom only. Charge 15 cents.

Hot Lemon

Lemon essence	4	drams
Solution citric acid..	1	ounce
Syrup to make.....	32	ounces

Draw 2½ ounces to a mug and serve with a spoon. The formula may be improved by using lemon juice instead of the essence.

Hot Lemonade

Lemons	3	
Solution citric acid..	4	drams
Granulated sugar ...		sufficient
Syrup enough to make	32	ounces

Grate peel from the lemons and triturate with half its weight of granulated sugar; express the lemons, add the syrup to the mixed juice and peel, let stand for several hours in a covered glass or porcelain vessel, strain and add the acid solution.

Hot Lemonade

Juice of half a lemon, 1 teaspoonful powdered sugar, twist a small portion of lemon peel over the cup so as to impart a flavor of the lemon, then fill up with hot water and stir.

Hot Lemonade

Squeeze half a lemon into cup and add one or two teaspoonfuls of sugar; fill with hot water. This is the proper way to make hot lemonade.

Hot Royal Lemonade with Egg

White of one egg, juice of one lemon, three spoonsfuls powdered sugar. Mix with spoons and stir while adding hot water. Serve with nutmeg and cinnamon. Charge 15 cents. (Geo. A. Zahn.)

Hot Soda Toddy

Lemon juice	2	drams
Lemon syrup	1	ounce
Aromatic bitters ...	1	dram
Hot water enough to make	8	ounces

Sprinkle with nutmeg or cinnamon.

Hot Lemon Sour

Lemon syrup	1	ounce
Lemon juice	2	ounces
Hot water to fill		

Instead of lemon juice 1 dram of lime juice and a dash of solution of acid phosphate may be used.

Hot Cream Lemon

Lemon	1	
Alcohol	1	ounce
Solution citric acid..	2	drams
Sugar	20	ounces
Water	20	ounces
White of egg.......	1	

Grate the peel of the lemon and macerate with alcohol for a day, express; also express the lemon, mix the juice and extract, add the sugar and water, dissolve by agitation and add the solution of citric acid and the egg white, the latter being first beaten to a froth.

Frosted Hot Lemonade

For this use two ounces of lemon syrup made from fresh fruit. Fill the mug with hot water. Mix and finish with a spoonful of marshmallow dressing. Serve with cheese wafers.

Hot Citric Phosphate

Lemon syrup	1½	ounces
One fresh egg		
Citric phosphate	1	dram

Mix well in a shaker, transfer to a mug and fill with hot water. Have the water a few degrees below the boiling point to prevent the egg from becoming stringy.

Hot Silver Fizz

White of 1 egg, juice of 1 lemon, 3 spoonfuls powdered sugar. Mix with spoon and stir while adding hot water. Serve with nutmeg and cinnamon. Charge 10 cents.

Hot Lemon Punch

This can be made from cold lemon syrup prepared from the fruit, but a special syrup may be made with the gratings of 6 and juice of 18 lemons to the gallon. The latter is the better method.

Hot Lemodine

Lemon essence	1	ounce
Orange essence or compound spirit of orange	2	drams
Nutmeg essence	15	drops
Lime juice	4	drams
Solution citric acid..	4	drams
Syrup enough to make	32	ounces

Statesman's Bracer

Lemon juice	2	drams
Lemon syrup	1	ounce
Aromatic bitters	1	dram

Mix and add enough hot water to fill an 8-ounce glass. Top off with mixed spices. Price, 10 cents.

Orange Gold Mine

Orange syrup	1	ounce
Sol. acid phosphate..	1	dram
Hot water to fill an 8-ounce mug		

Price, 5 cents.

Hot Limetta

Lime juice	1	ounce
Strawberry juice ...	½	ounce
Sugar	1	spoonful

Fill up with hot water, stirring well.

Hot Limeade

Lime juice	½	ounce
Orange syrup	1	ounce
Ginger syrup	½	ounce
Hot water.		

Hot Lime Juice

Lime juice	½	ounce
Lemon or ginger syrup	1	ounce
Hot water to fill		

Lime juice with lemon or plain syrup or with sugar and hot water may be dispensed as "hot limeade."

Hot Grapeade

Grape juice	1	ounce
Lemon syrup	1	ounce

Hot water to fill mug.

Hot Raspberry

Raspberry vinegar syrup	½	ounce
Raspberry juice	½	ounce
Lime juice	½	ounce

Place in mug and fill with hot water.

Lambrakis Hot Lunch

Into a mixing glass put:

Coca-cola	½	ounce
Chocolate syrup	½	ounce
Plain cream	2	ounces
Malted milk	3	teaspoonfuls

Shake well, transfer into a 12-ounce bell glass and fill with hot water. This drink can be made with an egg or it may be served cold. Price—10 cents; with egg, 15 cents.

Hot Royal Nectar

Nectar syrup	1	ounce
Lime juice	½	ounce
Grape juice	½	ounce

Fill with hot water, add a slice each of orange and lemon.

Hot Checkerberry

Draw half ounce of wintergreen syrup and 1 ounce of red orange syrup into a mug and fill with hot water. Top with whipped cream. It may also be served by using 1 ounce wintergreen syrup and omitting the orange.

Hot Apple Float

Place in a shell glass one ounce each of pineapple juice or syrup and one ounce of crabapple syrup. Fill with hot water and stir well, then float a spoonful of whipped cream on the liquid.

Hot Crab Apple

Pour 1 ounce of crab apple syrup into a mug and fill with hot water, stir well and serve.

Bonne Bouche

Egg	1	
Cherry juice or syrup	2	ounces
Powdered sugar	1	spoonful

Mix thoroughly, continuing the stirring while adding the hot water. Then add two cherries and a slice of orange, and top off with nutmeg.

Cherry Kicker

Cherry juice	1	pound
Sugar	1¾	pounds
Water	½	pint

Make a syrup. To dispense, pour 1½ ounces in an 8-ounce soda mug, add 1 dram of solution of acid phosphates and fill with hot water. The juice of a quarter lemon is often preferable to acid phosphate in a hot drink.

Hot Puff

One ounce of vanilla syrup, white of 1 egg, 1 ounce of cream. Shake well; add whipped cream and fill cup with hot water.

Chin Chin

Loaf sugar		cubes
Extract of mint julep	10	drops
Warm milk	2	ounces
Hot water		sufficient

Top off with whipped cream and powdered nutmeg.

Christmas Hot Punch

Place the juice of 1 lemon and ½ ounce sherbet syrup in an 8-ounce mug; draw 6 ounces of hot water into another mug, and mix with the liquid in the other mug by pouring back and forth from one mug to the other a few times. Price, 10 cents.

Hot Don't Care

Don't care syrup....	½	ounce
Egg	1	
Bitters	3	dashes
Cream	1	ounce

Mix thoroughly and stir while adding hot water. Top off with grated nutmeg or cinnamon.

Hot Frutescens

Strawberry juice ...	½	ounce
Raspberry juice	½	ounce
Vanilla syrup	1	ounce
Hot water	1	cupful

Top off with whipped cream.

Hot Parisian Blaze

Champagne syrup ...	1	ounce
Sweet mint syrup ...	½	ounce
Sol. acid phosphate..	3	dashes

Fill with hot water and add a slice of lemon, and, if obtainable, a sprig of mint. Fresh mint leaves can usually be obtained from any first-class butcher shop.

Hot Pineapple Fizz

Pineapple syrup	1	ounce
Lemon syrup	1	ounce
Saturated sol. bicarbonate soda	½	ounce

Hot water and a dash of phosphate.

Jones' Special Hot Punch

Take the yolk of one egg, one ounce of grape juice, one-half ounce lemon juice, two spoonfuls powdered sugar and mix thoroughly. Continue to mix while filling up mug with hot soda. Top off with whipped cream and sprinkle a little nutmeg on top. This preparation is said to be a "winner" and affords a good profit when sold at 15 cents. (George A. Zahn.)

Tant Mieux

Strawberry juice	½	ounce
Pineapple juice	½	ounce
Vanilla syrup	1	ounce

Place in cup, fill with hot water, and top off with whipped cream.

Ginger Snap (hot)

Break an egg into a suitable glass, add 1 ounce each of ginger syrup and grape juice and 3 or 4 dashes of lemon juice. Shake thoroughly, add about 4 ounces of hot water to the mixture in the shaker, strain carefully into a mug, top off with whipped cream and a sprinkle of nutmeg or cinnamon, and serve.

Ginger Hot

Loaf sugar	4	cubes
Soluble extract ginger ale	10	drops
Soluble extract lemon	10	drops
Fruit acid	10	drops
Hot water	1	cupful

Hot Ginger

Ginger syrup	1	ounce
Sweet cream	2	ounces

Fill with hot water and top with whipped cream.

Ginger Toddy

Ginger syrup	½	ounce
Tea syrup	1	ounce
Currant juice	½	ounce

Add hot soda and serve with grated cinnamon.

Hot Gingerade

Fluid extract of ginger	10	fluid drams
Precipitated calcium phosphate	4	drams
Sugar	20	ounces
Water	20	ounces

Triturate the fluid extract with the precipitated calcium phosphate, expose in a warm place until the alcohol has evaporated, triturate with the water, macerate for several hours, stirring occasionally, filter, and in the filtrate dissolve the sugar by agitation. To dispense, pour 1½ ounces in an 8-ounce soda mug and fill with hot water. Cream (about 1 ounce) may be added if desired. The "soluble essence of ginger" of the National Formulary may be used in place of the solution of ginger here directed.

Hot Scotch

One ounce hot Scotch syrup; add hot water, stirring constantly. Top off with cream.

To make the hot Scotch syrup, take:

Soluble essence of ginger	4	ounces
Soluble extract of capsicum	¼	ounce
Solution extract of gentian	1	dram
Essence of orange peel	3	drams
Lemon syrup	20	ounces
Caramel coloring	½	ounce

Mix thoroughly and keep in a syrup bottle.

Red Hot

Vigoral	1	ounce
Worcestershire sauce	10	drops
Tabasco sauce	2	drops
Lemon juice	1	dram
Hot water to fill mug		

Season with salt and pepper or celery salt.

Hot Catawba Punch

Catawba syrup	1	ounce
Sweet cream	2	ounces
Angostura bitters		dash

Stir while filling with hot water. Serve with grated cinnamon.

Quip Ridotto

This drink possesses a vinous flavor; take of:

Lemon juice	3	drams
Sugar	3	drams
Port wine	½	dram
Fresh essence of lemon	10	drops
Whipped cream		sufficient

Place the first four ingredients in the mug, then draw half full of hot water, stir, add the whipped cream, and finally fill the cup with hot water. Stir from the bottom.

Hot Pepsin Phosphate

Liquid pepsin	1	teaspoonful
Sol. acid phosphate	2	dashes
Lemon syrup	1	ounce
Hot water	1	cupful

Hot Pepto-Beef

Crystal pepsin	5	grains
Warm water	½	ounce

Dissolve, then add 1 teaspoonful beef bouillon, 1 cupful hot water. Serve with pepper and salt.

Hot Pepto-Lime

Lime juice	½	ounce
Lemon syrup	½	ounce
Essence of pepsin	1	dram

Stir while adding hot water. Price—Eight-ounce mug or glass, 5 cents.

Pepso-Lemo

Lime juice	½	ounce
Lemon juice	½	ounce
Essence of pepsin	1	dram

Add two teaspoonfuls sugar, a bit of peel, spice, and serve in a hot mug.

Prepared Milk

The prepared milk prescribed for the dispensing of many of the hot drinks is made by taking 1 pint of pure milk, 4 ounces evaporated milk or 16% cream, ⅛-ounce extract vanilla, 5 grains of bicarbonate of soda and mixing all together.

Celery Salt

Powdered celery seed	3	ounces
Salt	12	ounces

Pulverized mace, pulverized allspice, of each 180 grains.

Hot Tea

Loaf sugar	4	cubes
Extract Oolong tea	1	dessertspoonful
Prepared milk	1	dessertspoonful
Hot water sufficient to fill cup		
Whipped cream	1	tablespoonful

Oriental Tea

Tea syrup	1	ounce
Red orange syrup	½	ounce
Aromatic bitters	½	dram

Place in hot soda mug and fill with hot water. Sprinkle with cinnamon.

Tea a la Russe

Peel a juicy lemon, slice thin, taking out the seeds; put one slice in each teacup, sprinkle the lemon with sugar and pour hot tea over it. Should be served with hot cream on the side.

Turkish Tea

Tea syrup	1	ounce
Blood orange syrup	½	ounce
Cream		dash

Fill up with hot water, stirring well.

(8) Sundaes and College Ices

Probably the average dispenser will consult the pages in this section more than any other. Syrup and ice cream formulas constitute an important part of his stock in trade and business equipment, but in the profitable pushing of specialties he will avail himself of the experience and genius of his fellow workers in the field of good soda. Since most dispensers prefer to push specials of the sundae class, the following pages are sure to be of peculiar value.

The two hundred and seventy-five formulas presented in this section are the most complete collection of sundaes published and, with the following divisions on desserts (which are highly elaborated sundaes) and special sundae toppings, total five hundred and sixty-two different formulas.

In serving sundaes it is important that an appeal should be made to the eye as well as to the palate. It is poor policy to slap together a messy concoction. Never let the syrups run over the edge of the sundae glass. See that the handle of the spoon is not sticky with syrup. Place nuts, cherries, or knobs of whipped cream carefully on the sundae so that the effect may be pleasing.

It is customary to serve a glass of iced water with all sundaes. This should not be omitted, and do not wait for the customer to ask for it. Many dispensers serve a cracker with the sundae. This is desirable, especially in many neighborhoods, but such service is not absolutely necessary. A reasonable amount of judgment must be exercised as to the kind of cracker served. With chocolate, coffee, maple, and similar flavors a salty cracker is very acceptable, but with the fruity flavors and with fresh or crushed fruits a sweet cracker is correct.

Words of warning can advantageously be sounded in the matter of naming sundaes. The names in the following pages are standard in many cases. A great number of the following formulas are prize winners in the SODA FOUNTAIN's monthly contests and as such, have a wide reputation. There is always a danger in carrying the fancy name idea too far—for a fine name does not of necessity mean a fine sundae, while the too fancy names are apt to be fantastic and even funny to one who possesses a sense of humor. Stick to original names of the sundaes and help to make them more and more standard and uniform. The Formulary contains typical formulas for sundaes for every special occasion. A decidedly local event or an intimate personal touch is the only reasonable excuse that can be advanced for the use of a specially coined name.

Sundaes offer the widest possible range in advertising. Window strips and slips in or on the menu are the favorite means of bringing a special to the attention of the public. A little skill in lettering and a little ingenuity in cutting out magazine covers and pasting them on white cardboard is often all that is necessary to make a most attractive advertising sign. Unless well done, however, it is better not to attempt such signs. A poorly made amateurish sign does not create a favorable impression on the prospective patron.

SUNDAES AND COLLEGE ICES

Chocolate (plain)

Make a thick, smooth paste with powdered cocoa and hot water and add simple syrup until the correct consistency is obtained. Pour over vanilla ice cream.

Vanilla syrup may be added in this formula for flavor

Chocolate Nut Freeze

Into a sundae glass place ½ ounce of chocolate syrup, ½ ounce of sweet cream, one teaspoonful of vanilla ice cream, and two teaspoonfuls of nut meats mixed well. Add one 20-to-the-quart scoopful of vanilla ice cream, oover with whipped cream, and place a whole Maraschino cherry on top. Sells for 15 cents. The author says the name is "very catchy." (Theo. Louvis.)

Chocolate Nut

Chocolate syrup, 2 quarts; cover thickly over chopped English walnuts. Serve a ladle of this dressing over a ladleful of ice cream and top off with whipped cream and 1 whole cherry. Price, 10 cents.

Malted Chocolate

Chocolate syrup, 1 ounce; malted milk, 1 tablespoonful. Mix thoroughly and pour over one measure of ice cream.

Grape Nut

On a suitable footed sundae dish put one 12-to-the-quart disherful of any special ice cream; over this pour a small portion of chocolate syrup, top with about four spoonfuls of grape nuts and two red cherries. The "grape nuts" are the kind used as a breakfast food. Sells for 10 cents. (Warren Thomas.)

Arabian

Take a dish full of chocolate ice cream (or a dish of vanilla ice cream with a layer of chocolate syrup over it). Over this place a spoonful of crushed figs and a large spoonful of whipped cream, putting on each side a Nabisco wafer. Serve in a sherbet glass with a spoon, topping off with a maraschino cherry.

Lady Devonshire

Chocolate ice cream, orange ice, whipped cream, nuts, fruits. (Geo. Dauernheim.)

Biltmore

In a high-ball glass place a scoopful of vanilla ice cream and cover with strawberry syrup. Add two spoonfuls of chopped nuts and fill glass with chocolate frappe. Cap it off with whipped cream and a Maraschino cherry, selling for 15 cents. (Wade T. Surratt.)

Euchre Special

On a china ice cream plate place half of a banana, which cover with chocolate whipped cream. On this lay a slice of a pint brick of vanilla ice cream one-half inch thick. In two diagonal corners and in the center of the slice of ice cream put red Maraschino pineapple aces, to represent the different aces of the cards. On the side of the dish beside the frappe lay two nabiscos and serve. Sells for 15 or 20 cents.

The author explains that the so-called pint bricks of ice cream are used because, when sliced, the slices are near to size of the playing card they are supposed to represent. To make the chocolate whipped cream, use 3 ounces of cocoa and mix thoroughly with a little simple syrup; then pour the mixture into a quart of heavy cream when it is almost whipped. (Sterling Miller.)

Mt. Washington

On a sundae dish place a No. 10 disherful of chocolate ice cream. Cover with whipped cream, add three Maraschino cherries and sprinkle over all a spoonful of walnut meats.

Pike's Peak

Dish chocolate ice cream topped off with whipped cream and a blanched almond on top.

Chocolate Frappe

Frozen whipped cream, sufficient; shaved ice, sufficient; chocolate syrup, 2 ounces. Fill a glass half-full with frozen whipped cream, fill with shaved ice nearly to the top, and pour in the chocolate syrup. Charge 15 cents.

Pride of the Rockies

Into a glass sundae dish, place a large ball of chocolate ice cream. Then with a knife cut it into four quarters. Separate the parts so that they will nearly touch the sides of the dish. Into the opening thus formed, put a ladle of crushed cherries, being careful to drain off the syrup first. Then fill in the openings on the sides with a teaspoonful of whipped cream beaten very stiff. Lastly sprinkle over all some shredded cocoanut. Price 15 cents. (Hector Johnson.)

Black Hills

In a banana-split dish place a No. 10 disherful each of vanilla and chocolate ice cream side by side. Over these pour chocolate syrup and nut meats, and top each cone with a cherry. At the side of each cone place a nabisco wafer. The two cones covered with chocolate are supposed to represent the Black Hills in which the city of Lead, S. D., is located. (C. H. Bigalow.)

Bull Moose

Place a No. 10 scoopful of ice cream in a sundae glass; pour over the cream a ladleful of chocolate marshmallow dressing add a spoonful of chopped nuts and top with a chocolate bud. Stand two froufrou wafers, one on each side of the cream, to represent the horns of a moose. Prepare the marshmallow cream as follows: Make a smooth paste with chocolate and hot water, and add to the marshmallow cream. About one ounce of chocolate to the quart of cream will give the desired flavor. This sundae sells readily for 15 cents.

The author enclosed with his formula a photograph to show how he advertises this specialty by means of a picture of a moose head painted on a mirror inside and also on the window outside. He wrote that a picture of this kind will attract the attention of the public much quicker than the ordinary lettered sign, and it is not at all difficult to make. Unfortunately, this picture was not adapted for reproduction. An ordinary newspaper cartoon is enlarged on a large piece of wrapping paper, the enlargement being outlined with a tracing wheel. This serves as a pattern, which is then held against the glass and patted with a powder bag, the powder dusting through leaving a clear outline of the moose head on the glass, the figure being then filled in with a brush. (Harry P. Ayers.)

Coney Island

A rounded helping of chocolate ice cream, dressed with a thickened orange dressing and topped with a marshmallow. Serve with a macaroon or a nabisco.

High School

Take three portions of chocolate ice cream (No. 16 disher) and place them in triangular form on a flat ice cream saucer; then place some whipped cream in the center and dust over with finely chopped walnuts, or, if preferred, a Maraschino cherry may be used. Price 15 cents.

Sorority

Into a tall goblet put one No. 12 dipperful of chocolate ice cream, then add a small quantity of chopped nuts and a small ladleful of maple syrup. Put a No. 16 dipperful of vanilla ice cream on top of this and over it put a spoonful of thick bitter-sweet chocolate. Top off with whipped cream and a chocolate-dipped maraschino cherry. Charge 15 cents. (A. E. Perkins.)

Tango

In an 8-ounce phosphate glass put a No. 20-to-the-quart disherful of chocolate ice cream. Over this pour ½ ounce butter-scotch dressing and a soda spoonful of finely ground nuts. On this put a No. 20-to-the-quart disherful of vanilla ice cream, ½ ounce marshmallow dressing, and a dash of ground nuts. Over this pour a very little heavy chocolate dressing, and top with a cherry or slice of fresh peach, and one cloverleaf wafer. Charge 20 cents. (Philip W. Traker.)

The Midnight Sun

Into a fancy sundae dish place a ladleful of vanilla ice cream and over it pour a suitable quantity of "sauce princessia." Over the latter pour a spoonful of chocolate syrup and surround all with a ring of whipped cream; on this place bits of cherries. "Sauce princessia" is made as follows: Stir well together 6 yolks of eggs and 4 pounds of sugar; add ½ gallon of pure cream, stirring all the while and then boil the mixture for five minutes. Add a sufficient quantity of orange coloring to produce the desired tint. This makes a very delicious sauce. (Shirley B. Ware.)

Palmer House

Place a dipperful of vanilla ice cream (eight-to-the-quart) on a large sundae dish. Place four clover leaf wafers on each side of the cream, and over the whole place the peeled half of a peach. On the peach place a Maraschino cherry. In one end of the dish put a few ground nuts over a small sprig of mint. Over all pour some chocolate syrup. Sells for 15 or 20 cents. (Charles T. Dakes.)

Parisian Bon Bon

Serve in an 8-ounce glass as follows: Place in the glass a small scoopful of chocolate ice cream, then cover the cream with a few crushed macaroons, a little chocolate syrup, and a pinch of shredded cocoanut. Fill the glass even to the brim with vanilla ice cream and top with a cherry. Sells for 10 or 15 cents. The author states that it has proved "a great seller." (Carl F. Mock.)

The Knickerbocker

Ice cream, 4 ounces; chocolate syrup, ½ ounce; raspberry crushed fruit, ½ ounce; whipped cream, 3 ounces; 2 brandied cherries. Place the ice cream in a glass and add chocolate syrup, some of the whipped cream and 2 dashes of essence of rose. Add raspberry fruit and then balance of whipped cream and the rose essence; top with cherries. Each of the separate portions will appear as a separate layer in glass. This sundae should be served in a tall, narrow, 10-ounce, thin glass, and the dispenser in serving should insert long spoon to the bottom of glass just once and draw slowly towards top, so as to slightly mix the ingredients. This is done for appearance only. Fifteen cents should be secured for this sundae and all materials should be of the very best.

Victory

On a long dish place a small dipperful each of vanilla ice cream and orange ice. Over these pour a small ladleful of chocolate syrup and top off with whipped cream and cherries beaten together. Serve with two nabisco wafers. Sells for 15 cents.

Country Club

Cone of ice cream in sundae cup. Pour on top 1 ladleful of chocolate, 1 ladleful of chopped nuts, and put 1 green and 2 red cherries on each side. Sprinkle over all 1 teaspoonful of malted milk. Price, 15 cents.

Dessert Francais

Ice cream in sundae glass, chocolate flavor; slice one fresh banana around edge, sprinkle with chopped nuts, top with whipped cream and maraschino cherry. Price, 15 cents.

Gold Dust Twins

Take a suitable dish or plate and place on it two No. 20 disherfuls of chocolate ice cream and cover each with chocolate syrup. Over each sprinkle powdered nabisco wafers and top with a red cherry, one on each cone of cream. Sells for 10 cents.

Chocolate Pecan Puff

Put into a suitable glass one No. 10-to-the-quart ladleful of vanilla ice cream, and cover it with a mixture of ½ ounce chocolate syrup, 1 spoonful of whipped cream, and ½ ounce of pecans. The dressing should be prepared fresh as called for. Yields a good profit at 15 cents. The author writes that this is a favorite with the "sorority girls" of his city. (Wallis H. Brown.)

Yama Yama

Place one (No. 12) scoopful of chocolate ice cream into a sundae dish and over it pour one ladleful of crushed pineapple. Top off with whipped cream, a few pecans and a cherry. Charge 15 cents. (Joseph Casiragh.)

Bachelor's Special

Into a stem frappe glass place one disherful of chocolate ice cream and over the cream sprinkle a few chopped nuts. Pour over the ice cream and nuts a small quantity of vanilla syrup, then well cover with "bitter sweet" chocolate syrup. Cut three marshmallows into cubes, making four cubes to each marshmallow. Place these around the edge of the sundae, an equal distance apart. Top off with whipped cream and decorate with one red cherry and one cube of marshmallow. Price 15 cents. (Walter J. Taber.)

Buster Brown

Fill a punch glass with half chocolate ice cream and half pineapple sherbet, and pour over the mixture a ladleful of caramel nut sauce or catawba syrup.

Walnut Chocolate

Take the usual quantity of ice cream and pour over it a heavy chocolate syrup. Garnish with walnut halves, or a ladle of walnut russe. Price, 10 cents.

Startler

Into a 6-ounce glass put a No. 16-to-the-quart dipperful of chocolate ice cream; take a spoon and push it down into the cream on one side of the glass so as to leave a hollow in the middle of the cream; in the hollow or cavity thus made, pour a ladleful of crushed Hawaiian pineapple and a Maraschino cherry; then put a No. 16-to-the-quart dipperful of vanilla ice cream on top and over it a ladleful of marshmallow dressing; cover it with some dry chopped nuts and top off with a red or green cherry. Sells at 15 cents. (W. Sidney Stevens.)

Rubaiyat

Place a ladleful of ice cream in a sundae dish and over it pour 1½ ounces of chocolate syrup. Top off with whipped cream and two thin slices of pineapple. Price, 15 cents. (Epworth Reilly.)

Peg O' My Heart

Into a footed sundae cup put a small dipperful of vanilla ice cream; cover with marshmallow whip and then add ½ ounce chocolate syrup. Insert slices of banana around the inside of the glass, and top with whipped cream and chopped nuts. Decorate with red and green cherries. Sells for 15 cents. (Bruno Schubet.)

Hydrox

In a regular sundae dish place a 20-to-the quart dipperful of chocolate ice cream, and over it pour a dipperful of "chocolate nut fudge"; on top of the mixture put a ladleful of marshmallow whip. On the dish and beside the sundae stand a chocolate hydrox biscuit and serve. To make the "chocolate nut fudge" mix and boil to 120°, 1 quart of milk, 1 teaspoonful of butter, and 3 ounces of cocoa; when cold, add chopped walnuts. This recipe makes a most delicious fudge and one which can be served at any fountain.

A window sign to advertise the sundae can be made of heavy paper, the lettering being done with a dark brown ink to simulate the color of chocolate, as follows:

Special To-day.
HYDROX SUNDAE
At the Fountain
10 Cents.

This sundae is worth 15 cents. (Sterling Miller.)

Lone Star

Over a ladleful of ice cream in a sundae glass pour some chocolate syrup and cover with Texas pecans, almonds and dates chopped together. Price, 15 cents.

Imperial Chocolate

Stand two bars of sweet chocolate in a sundae cup in such a manner that a cone of vanilla ice cream can be dropped between them; put chocolate syrup and whipped cream over the cone; in an indentation made in the top of cream with a spoon, place a scoopful of ground nuts; on one side of the dish place a green cherry and on the opposite side put a red cherry. Price, 15 cents.

Chocolate Shop Temptation

In a sundae glass place a scoopful of chocolate ice cream and pour on some rich chocolate syrup; over the latter dash a spoonful of whipped cream and sprinkle on some ground roasted almonds. Top off with a blanched almond. Price, 10 cents. (Miss Ida Eleanore Johnson.)

Chocolate Nougatine

Over a ladleful of vanilla ice cream put a large spoonful of chopped nuts and over the nuts pour marshmallow whip syrup; over this pour a mixture of ½ ounce of chocolate syrup with 2 ounces of stiff whipped cream and top off with ½ of a walnut. Price, 15 cents. (Emil J. Bastion.)

Chocolate Marshmallow

In a sundae glass put a disherful of chocolate ice cream (French) and over it pour a marshmallow sauce made by diluting marshmallow whip with simple syrup and adding a few dashes of vanilla to flavor. Top off with nuts and a red cherry.

Coffee (plain)

Make a rich syrup of coffee and pour over vanilla ice cream. Top with whipped cream and charge 10 cents.

Australian

Vanilla cream and New York cream in a regular sundae cup; pour over the ice cream port wine syrup, then add grated nuts and top off with whipped cream and maraschino cherries.

Claret Trickle

In a six-ounce flare phosphate glass place a small dipperful of vanilla ice cream; over the cream pour a small ladleful of chopped pecan nuts in maple syrup, then a small dipperful of pineapple sherbet; on top place three large Maraschino cherries in a little of the Maraschino liquor and then pour over them one-half ounce of rich claret syrup mixed with one dash of phosphate; top with whipped cream. Place the glass in a soda holder and serve with spoon by the side and a glass of clear ice water. Price, 15 cents. (Alonzo Draine.)

Auld Ireland

Take a ball-shaped portion of pistachio ice cream filled with ground pistachio nuts. Color the cream a light green. Over the cream pour about 2 ounces of orange flower flavored syrup, which should be very heavy and also colored green. Now drop in 6 or 8 roasted filberts (to represent the stones). Then take a tooth pick and with it place around the ice cream round strips of crystallized ginger, previously colored green (to represent the snakes); on top of the cream drop some well whipped cream, colored light pink, and sweetened and flavored with rose (for the rose of Old Ireland), dropping a green cherry with a roasted filbert inside of it in the center of the cream. Place the above in a stem sundae glass on a 5-inch plate on which has been laid a St. Patrick napkin and a dainty spoon. Serve with a glass of Vichy, well charged, giving with each order a white carnation having green colored edges. Price 15 to 25 cents. (C. L. Hadley.)

Maple Nut

Vanilla ice cream, 1 dipperful; maple syrup (the real thing), 2 ounces; place in a sundae glass, sprinkle with chopped English walnuts, and top with whipped cream. Price—10 or 15 cents.

Maple Caramel

In an ordinary sundae cup place one (16 to the quart) dipperful of vanilla ice cream. Over the ice cream pour 1 ounce of maple caramel syrup and 1 large spoonful of ground English walnuts. Top off with whipped cream and one Maraschino cherry. Price, 15 cents.

"Maple Caramel" for the above is made as follows: Beat up 9 eggs very lightly, add 1 quart xx sweet cream, 1 quart of pure maple syrup and 4 ounces solution of caramel; strain and cook in a double boiler until the mixture comes to a boil; allow to cool and place on ice; the maple caramel is then ready for use. (Low W. Garnett.)

Maple Honey

Prepare a syrup of 16 ounces of maple syrup, 4 ounces of strained honey and 4 ounces vanilla syrup. Into a mineral water glass (7-ounce is best size) put 4 or 5 ounces of vanilla ice cream, add 1 ounce of of the above syrup, mix well with spoon. Care should be used in mixing, as the beverage must not be made mushy. Then sprinkle over this a heaping spoon of ground English walnuts, add some whipped cream over the nuts and over it sprinkle a very little powdered sugar, dress with a slice of orange and a cherry, set the glass into a small plate and serve. Charge 15 cents.

Maple Leaf

Take a saucer, such as are commonly used for sundaes and around its edge place five macaroons. Place a cone of vanilla ice cream (measured out with a 12 to the quart ice cream disher) in the center of the saucer. Over the ice cream pour one-half ladleful of pineapple fruit and one ounce of maple syrup. Top off with a small measure of maple sugar. This formula is especially recommended.

The author writes: "We used fifty gallons of maple syrup last season, supplying customers with 'maple leaf sundae.' Guess that's going some for Canada, 'the land of the maple leaf.'" (Harry G. Frame.)

Whipped Maple Cream

Place a cone of vanilla ice cream on a dish. Put three whipped cream chocolates around evenly on the bottom; pour maple syrup over the ice cream. Sprinkle over a few nuts and top off with whipped cream and a cherry. Price, 15 cents.

Peanut Sundae

Place 2 ounces of Spanish peanuts, freshly roasted, shelled and blanched, in a mortar, and mash with a pestle. Add 4 ounces of peanut butter and rub together. Then add a little salt, 2 drams of powdered acacia, and rub again, gradually adding an ounce of water. Reduce to a smooth paste, and gradually add ½ gallon of simple syrup. To serve, pour over a portion of ice cream.

Peanut

On a suitable sundae dish place one scoopful of ice cream and over it pour peanut butter syrup; top off with whipped cream and a cherry. Sells for 10 cents. (Logan Taylor.)

Virginia Sundae

Fill a No. 12-to-the-quart dipper with plain vanilla ice cream, and before releasing the cream from the dipper, make a hollow or cavity in the center of the cream with a sundae spoon. In the cavity place a spoonful of good peanut butter. Now turn the ice cream into a sundae dish, and cover over the top with a ladleful of marshmallow dressing and some ground nutmeg. Sells for 15 cents and is easily and quickly dispensed. To use the author's recommendation: "It's a humdinger for taste." (Max H. Karlsruher.)

Creamed Peanut

On a small flat dish place a dipperful of vanilla ice cream, over which pour a ladleful of peanut butter, which has been mixed with simple syrup, and kept in a crushed fruit bowl. Add a ladleful of chocolate syrup, which should be made rather heavy. Top with whipped cream and half an English walnut.

Cocoanut Special

Four ounces and a half of vanilla ice cream, 1 ounce of orgeat syrup, 1 ounce grated cocoanut. To serve glace, cream glace and ices use a broad, short glass. Place ice cream in 7-ounce glass, add on top the orgeat syrup, then the cocoanut. Serve a glass of plain ice water and a paper napkin. Charge 10 cents.

Cocoanut Cream

Take a 6-ounce sundae dish and in it place a 10-to-the-quart scoopful of vanilla ice cream; over the ice cream pour a ladleful of whipped cream and on it a teaspoonful of chopped nuts; over all, sprinkle some good, well-toasted cocoanut and top with one chocolate cream. Sells for 15 cents. (Paul Hurwity.)

Macaroni Cocoanut

Use a long plain "banana split" dish and place upon it, in the order named, beginning at one end, three small cones of caramel ice cream, nesselrode pudding and chocolate ice cream, the pudding being in the center of the dish. Around the pudding and between the cones of cream, pour a small ladleful of stiff whipped marshmallow cream. Have previously prepared in an air-tight bowl crisply toasted shredded cocoanut and crumbed macaroni mixed; sprinkle this freely over the whipped cream. On the cones of caramel and chocolate ice cream place a small cube of maraschino pineapple and on the nesselrode pudding put a chocolate cherry. Serve with a glass of ice water and two lady fingers or sweet wafers.

The author says this sundae has proved very popular with his trade and can be served for 25 cents at a good profit if the dispenser is careful and uses a small disher; it can also be as easily made and as quickly turned out in a rush as a banana split and a hundred other similar dishes. (Chas. Greenberg.)

Frozen Cocoanut Ball

Vanilla ice cream, 1 small ladleful; clover leaf wafer, 1; marshmallow sundae, 1 ladleful; freshly grated cocoanut, a sufficient quantity. Place the small ladleful of vanilla ice cream on a square of oiled paper and with another square of oiled paper form the ice cream into a round ball. (It is advisable to have these balls made up ahead. Keep them in cold cabinets.) Roll this ball into a plate of freshly grated cocoanut until it is well coated, then place the ball on a square clover leaf wafer on a fancy plate and over all pour a ladleful or 1½ ladlefuls of marshmallow sundae. Use a No. 10 disher for the ice cream, which must be firm. The cocoanut may be ground with a food chopper, using a very fine knife. Sells readily for 15 cents and is a winner. (C. E. Denton.)

Tasty Toasty

Into a suitable dish put a dipperful of vanilla ice cream; cover it with maple syrup and then sprinkle over the syrup a spoonful of toasted corn flakes.

The author states that he realizes the fact that but few 5-cent dishes are offered at the soda fountain counter for the public, and he therefore submits the above formula for a 5-cent specialty which has proved a big winner with him. (D. J. Fitz-Gerald.)

Creme de Menthe

Serve a ladleful of creme de menthe syrup over strawberry ice cream, adding a sprig of mint.

Dew Drop

Fill a stem glass two-thirds full of vanilla ice cream; then nearly fill the glass with mint and cherry syrup, drop a cherry in the syrup and finish with a lump of whipped cream on top.

Springtime

Serve ice cream in the shape of an egg on a dish. Pour over the cream creme de menthe syrup. Around the ice cream lay ½ dozen creme de menthe cherries and a spray of menthe.

Sundae a la Venice

Cocktail glass two-thirds full New York ice cream; fill glass with mint and sherry syrup and top off with whipped cream and creme de menthe cherry. Price—10 cents.

De Menthe Pineapple

Pour creme de menthe pineapple over ice cream in a sundae dish.

Strawberry

Strawberry ice cream, 4½ ounces; strawberry crushed fruit syrup, 2 ounces; add a couple of fresh ripe berries on top if in season.

Strawberry Snow and Cream

In a seven-ounce glass put one ounce of vanilla syrup and two spoonfuls of crushed strawberries; add a sufficient quantity of shaved ice and enough whipped cream to fill the glass. Mix well. Price, 10 cents.

Strawberries for the above may be prepared by adding one pound of sugar to each pint of crushed berries. (E. J. Sivley.)

Canterberry

One dipper strawberry ice cream, one spoonful crushed strawberries, one dipper vanilla cream; top with crushed pineapple and sliced bananas, and decorate with two English walnut meats. (E. D. Howe.)

Broken Hearts

Put a slice of brick vanilla ice cream on a 6-inch plate. Cover the ice cream with fresh, sweetened, and slightly mashed strawberries, and over these put sweetened whipped cream; top off with two whole strawberries and serve with two nabisco wafers. Sells for 20 cents. (C. F. Wagner.)

Militant

Into a suitable dish place a cone of strawberry ice cream, cover with a ladleful of fresh strawberries, and place a large red cherry on top. The "militant" feature is represented by a small hatchet stuck in one side. Sells for 20 cents. (F. Varney.)

Strawberry Puff

Put into a 6-ounce fancy glass one 20-to-the-quart disherful of vanilla ice cream, pour over it one ladleful of fresh crushed strawberries, and sprinkle on a few chopped nuts; fill the glass nearly full with whipped cream, making the latter stand high in the glass. Top off by sprinkling with chopped nuts and a whole cherry or a strawberry. Any other crushed fruit can be used in place of strawberries, if desired. Can be served at 10 or 15 cents with a good profit. (E. C. Edwards, Jr.)

New York

Champagne syrup, crushed strawberry. Pour over New York ice cream, serve in fancy sundae cup, top off with whipped cream.

Owl

Put into a tall flaring stem glass a No. 16 dipperful of vanilla ice cream and over it pour a small ladleful of strawberry fruit. Add a No. 8 dipperful of orange ice and top off with a ladleful of whipped cream and a Maraschino cherry. Sells for 15 cents. (H. M. Norris.)

Strawberry Creme

Place a disherful of fresh strawberry ice cream in a sundae dish, pour over it marshmallow sauce, put on a spoonful of nuts, and top off with whipped cream and a nice ripe strawberry. Price, 15 cents.

The whipped cream may be left out.

Strawberry Delight

Into a neat saucer place a No. 12 to-the-quart disherful of strawberry ice cream; over the cream put a small ladleful of strawberry crushed fruit, pour on a small quantity of mallo-creme, then sprinkle on a few nuts and top off with a cherry. Around the edges of the cream place a few slices of banana fruit. Sells readily for 15 cents, or it can be served with wafers and sold for 20 cents. (Paul Hurwitz.)

The Houn' Dog

Into a bell-shaped phosphate glass place one 12-to-the-quart dipperful of vanilla ice cream. Pour over it crushed raspberries, add ½ ounce of chopped and fresh roasted Spanish (blanched) peanuts, finally placing on top a small piece of cinnamon (the bark!). Sells for 10 cents. (Roy V. Proffitt.)

Trio

Use a 5-ounce tall stem glass and in it put a small scoopful of vanilla ice cream, a spoonful of ground walnuts and a small scoopful of orange ice. Then pour some raspberry crushed fruit over the mixture. Smooth down, top off with whipped cream and place a cherry on top. Sells for 20 cents. (G. R. Siegwald.)

Malted Grape

In a sundae dish place a No. 8-to-the-quart disherful of vanilla ice cream; over this sprinkle a light quantity of malted milk, cover with 1½ ounces of grape juice; top off with whipped cream, and decorate with ripe, purple Concord grapes. The author remarks that "there is just enough absence of sweetness to make this dish a popular favorite with those who do not wish for anything too sweet." Charge 15 cents. (G. W. Lehmann.)

Sunset

A ladleful of vanilla ice cream in sundae cup. Pour over it a thin grape syrup; top with whipped cream and a fresh strawberry.

Chaucerean

Fill a sundae cup two-thirds full of ice cream; fill the cup with iced grape juice, top off with whipped cream and red Maraschino cherries. Charge 15 cents.

Damon and Pythias

Serve on an ice cream dish or in a sundae glass by placing on one side vanilla ice cream, and on the other side pineapple sherbet, filling the center along the "median line" with grape juice. Charge 15 cents.

Metropolitan

In any deep sundae glass place vanilla ice cream molded out in a 12-size ice cream disher; pour over the cream 2 ounces of grape juice; then put one large Maraschino cherry on top of the cream and a spoonful of crushed walnuts on the side of the dish. Price, 10 cents.

Imperial Grape

Dish of half vanilla ice cream and half grape water ice topped off with whipped cream. (G. L. Loeffler.)

Peach Royal

In a sherbet glass place a large spoonful of whipped cream and over it place a ladleful of sliced peaches. Then add a scoopful of vanilla ice cream (16 to the quart); on one side of the ice cream place a ladleful of crushed pecan nuts, and on the other put a Nabisco wafer. On top and in the center place a ladleful of whipped cream. Decorate with a few whole pecan meats and top off with a Maraschino cherry. The whipped cream should be properly sweetened with pulverized sugar and flavored with a little vanilla extract. Price, 15 cents. (P. A. McCole.)

Peach Basket

Place one disherful (No. 12 size) of peach or vanilla ice cream on a comport glass, surround with crushed peaches; over the ice cream put one wafershell, one ladleful of whipped cream and top with Maraschino cherries. Sells for 15 cents.

The author of this formula states that "it is named after the 'peach basket hat'; it is a great novelty and takes with everybody." (Erna Hertzberg.)

Lady Mary

Into a cocktail glass put a small portion of sliced peaches, add a small ladleful of plain or fancy ice cream, as desired, and over it place whipped cream. In the center of the top of the cream place a cherry and over all pour some cherry juice, allowing the latter to run down over the sides of the mixture. The juice imparts a nice pinkish tint to the sundae. Put the glass on a fancy plate with two wafers. Price 15 cents. (C. H. Wilkinson.)

Alberta

Peel and slice one large Alberta peach, dropping the slices into a deep Colonial sundae cup; cover the slices with a layer of ground nuts, and on them place a cone of strawberry ice cream; decorate the cone with a sliced banana, pineapple cubes and maraschino cherries, artistically arranged. Top off with a ladleful of whipped cream. As an advertising medium the author uses the photograph of an attractive young lady with the name "Alberta" printed below the picture. Price high enough to at least cover costs. (Fay W. Fraker.)

Date-with-a-Peach

Take a "pin special" sundae dish and place in the bottom one-half ladleful of vanilla ice cream, then add half a scoopful of vanilla marshmallow cream, one 16-to-the-quart scoopful ice cream, one ladleful of crushed fresh peaches, and top with a seeded date on a toothpick. "Is a winner and can be profitably sold for 10 cents." This special was advertised by means of a window display and by "liners" in a local newspaper, which read as follows: "Get a 'Date-with-a-Peach' at ———'s soda fountain for 10 (or 15) cents." (Henry P. Ayers.)

Sweetheart

Split one lady finger, place the pieces in the bottom of a sundae dish and over them put one small scoop of ice cream, placing on it another lady finger and covering the whole with one fruit ladle of crushed peaches; top off with whipped cream. Price, 15 cents.

Peacherine

Two ounces raspberry syrup; one No. 10 disherful peach ice cream. Serve.

Lady Mary Somerset

Use fancy custard or dessert cup. Put in one small ladle of strawberry ice cream, add 4 slices of sliced peaches, fill glass with whipped cream, and top off with cherry and nutmeg. Price, 15 cents.

Dreamland Sundae

Into a banana special dish lay two good sized slices of a peach. In the center place a medium-sized scoopful of vanilla ice cream. Put a spoonful of whipped cream at each side of the ice cream and cover with walnuts and a cherry. Over the vanilla ice cream put a spoonful of crushed pineapple and top with a red and green cherry. Serve with two nabisco wafers. "A simple dish to prepare and sells readily for 15 cents." (Miss Florence E. Cavanaugh.)

Midnight Sons

In an oval dish place one 16-to-the-quart measure each of vanilla and strawberry ice cream, putting in the center of the dish a similar measure of pineapple sherbet. Over these pour some fresh sliced peaches, then sprinkle on a few pignolia nuts and top off with whipped cream and one each of red, white, and green Maraschino cherries. Sells for 15 or 20 cents.

The author states that this sundae has never failed to delight the ladies who are connoisseurs of choice delicacies. (Thos. Keriakedes.)

Peach of a Sundae

Over a ladle of peach ice cream pour a sauce made of the following: One pound of mixed nuts chopped fine, mixed with 1 pint of rich maple syrup.

Cherry

On a measure of ice cream in a saucer champagne glass, place several maraschino cherries and pour over them 1 ounce of cherry phosphate syrup. Top off with whipped cream and serve with a spoon.

Maraschino Cherry

Into an ordinary sundae glass place a No. 16 disherful of Maraschino cherry ice, top off with whipped cream and cherry. To make the Maraschino cherry ice, use the following formula: juice of one lemon, 8 ounces sugar, 2½ pints water, one pint Maraschino cherries (chopped fine) and the beaten whites of three eggs. Mix well and put the mixture, which should measure ½ gallon, into a freezer and freeze. Sells for 10 cents. (John H. Gassman.)

Cherry Royal

Take a 5-inch saucer, such as are used for serving ice cream. In the center place a No. 12-to-the-quart scoopful of vanilla ice cream. Around the base of the cream arrange a ring of large, fresh black cherries, with the stems removed; pour over the ice cream a ladleful of cherry royal sauce; top off with a spoonful of whipped cream and a red and green cherry.

The author writes that black cherries can be bought at any fruit store for 20 cents per pound. Open them on the bottom end with a sharp knife, and remove the pits. Prepare "cherry royal sauce" as follows. Put one pound of fresh fruit red cherries in one quart of water on the stove and cook until the cherries are thoroughly done; strain through cheesecloth, squeezing the pulp up well. Return the juice to the cooking vessel, add 3 pounds of granulated sugar, and boil until the mixture reaches the consistency of molasses; when cool, flavor with 2 ounces of port wine; keep the mixture cool. "This sundae will make a hit with your male patrons, as it is not too rich, and most men like cherries. Advertise the sundae by signs in the window or at the fountain, and charge 20 or 25 cents." (Harry G. Frame.)

Dixieland

Take a cone of ice cream in sundae cup, dash a little red cherry syrup over it. (Keep cherry syrup in phosphate bottle, dilute the concentrated cherry syrup with water, so it will come out of bottle.) Top off with a little whipped cream, another dash cherry syrup or orange syrup over the whipped cream and top off with a maraschino cherry. If you haven't whipped cream, serve without.

Creme de menthe cherries may be served same way with mint syrup.

Blossom

Maraschino cherry ice cream, shaped into flower, whipped cream. (Geo. Dauernheim.)

Cherry Temptation

On a banana-split dish place two scoopfuls (No. 10) vanilla ice cream, cover with crushed cherries, top with marshmallow cream and decorate with one red and one green cherry. Charge 15 cents.

Frozen Cherry Bon Bon

Spoonful ice cream in 8-ounce stem glass. Almost fill with shaved ice. Add 2 ounces cherry syrup, top with layer of ice cream, and add a maraschino cherry. Price, 10 cents.

Hot Cherry Sundae

In a sundae glass containing pineapple cream pour a ladleful of hot cherry syrup.

Cherry Sandwich

Layer of whipped cream in a cocktail glass followed by vanilla ice cream and an ounce of cherry syrup. Top off with pineapple sherbet and whipped cream and sell for 15 cents, (G. A. Kinney.)

Nabisco

One 16-to-the-quart dipper vanilla ice cream; four nabisco wafers; half a dozen whole cherries. Sells for 15 cents. (John C. Muse, Jr.)

Cherry Newport

Cherries, whipped cream, grated cocoanut. Price, 10 cents. (Geo. Dauernheim)

Spring Song

On a banana split dish place two small scoopfuls of vanilla ice cream, and over the cream and on the dish between the two portions of cream put two teaspoonfuls of whipped cream, topping off with two maraschino cherries and cherry syrup. Then put on one of the scoopfuls of cream, some cocoanut, and on the other some strawberries and nuts. Finally, place a chocolate marshmallow at each end of the dish. Sells for 15 to 25 cents. (Harry Slantchek.)

Cherry Cream and Egg

Place in the bottom of an 8-ounce fancy or good flint glass tumbler with stem bottom, one small ladleful of crushed cherries and over the cherries place a ladleful of ice cream (16 to the quart). Into a shaker glass (about 14-ounce capacity) put one whole egg, 1 ounce cherry syrup, 1 tablespoonful of sweet cream (ice cream), and cracked ice. Shake well and strain on to the contents of the tumbler. Place a medium sized spoon across the top of the tumbler after the ice cream has risen to the top of the mixture. By using strawberry syrup and crushed strawberries or different flavors, any customer may be served to taste. Charge 15 or 20 cents. (R. K. Snow.)

Bunker Hill

Into a fancy sundae glass put a scoopful of vanilla ice cream and over it pour a little cherry syrup; sprinkle over the syrup some ground nuts and cover with a little whipped cream. Then with a spoon make a notch through the whipped cream into the ice cream and in the notch insert a cherry pierced by the pole of a small souvenir flag. The flag measures 1¼x2 in., and can be procured at any kindergarten supply house for about 50 cents per gross.

The author explains: "As we employed them the flags were desirable souvenirs and pinned on the coats and hats of our customers, they proved a moving advertisement for us the rest of the day." He writes that he served this special on Feb. 22 with most satisfactory results, although it can be served on any national holiday. On St. Patrick's Day he served the sundae as "Pat's Shamrock," substituting creme de menthe for the cherry syrup directed in the above formula, and a shamrock pin piercing a creme de menthe cherry instead of the U.S. flag and the red cherry. Charge 15 cents. (Henry Mertens.)

Cherry Dip

On a measure of ice cream arrange in a circle 6 red Maraschino cherries, with one green cherry in the center, using a pair of tongs, and pouring over the "dip" a ladle of the Maraschino liquid. Charge 15 cents.

Cherry Blossom

Take ordinary whipping cream, flavor with cherry syrup, adding enough syrup to make the cream a dark pinkish, almost red color, and whip thoroughly. Keep on ice. To serve, put a small dipperful over a cone of ice cream (any flavor except strawberry or other cream of a reddish color), and top with a red cherry. Place two nabisco wafers at the side and serve. Sells for 10 cents, and according to the author, "it is a hummer with transient trade, which is our specialty, being close to the Union Station and the different street-car lines of our city." May also be dispensed under the name of "Cherry Puff." (V. C. Studney.)

Fleur d'Orange

Sundae proportion ice cream, orange syrup, whipped cream and orange cut in cubes. Strawberry Flower is prepared in the same manner, only strawberries are used instead of orange.

Bostonian

Place a measure of ice cream in a sundae glass, and over it artistically arrange sliced orange cut in diamond shaped pieces, sliced pineapple, maraschino cherries and English walnut halves. Charge 15 cents.

Cubanola

Peel and slice an orange. Cut a slice in half and place a half one each side of the plate. Set a cone of ice cream in the center, filbert nuts on one side, walnuts on the other, a green cherry on one-half of the orange, a red cherry on the other half. Sells for 15 cents.

Dove of Peace

Into a stem sundae glass place a No. 10-to-the-quart dipperful of vanilla ice cream, and cover the cream with orgeat syrup. Around the cream stand three half slices of orange, round side up; between each slice place a small spoonful of whipped cream; garnish each slice of orange with the half of a cherry, and the ice cream with ground pistachio nuts. On top of the sundae put an "icing dove," about 1½ inches in length (these "doves" can be procured at any baker's supply house). Sells for 20 or 25 cents. (H. T. Pierson.)

E. B.

Put a No. 8 dipper of orange ice on a fancy sundae dish, and pour over it a ladle of fresh crushed orange.

Golden Sunset

Into a suitable sundae dish place a No. 16-to-the-quart dipperful of vanilla ice cream; add a ladleful of crushed orange, sprinkle with finely chopped cherries, and top off with a whole cherry. Charge 10 or 15 cents.

Kansas City Sunflower

Take a nice, sweet, smooth-skinned orange, and beginning at the top of the fruit, cut the rind in about eight or ten places, following the natural divisions of the juicy pulp, and then peel the several sections of the rind thus cut outward and downward for about half the height of the fruit, so as to simulate the structure of a sunflower. Separate and spread out the divisions of the juicy pulp of the orange in the same way, and place on a dainty 6-inch sundae plate. In the center of the orange put ice cream of two different colors (or if preferred, vanilla ice cream alone) to represent the heart of the sunflower, and then decorate with pieces of oranges, cherries and nabisco wafers. Sells for 25 cents. (Robt. R. Russell.)

Mexican Tip Top

On a sundae dish place a No. 16 to-the-quart cone-shaped disherful of peach ice cream. Diagonally up and down the cone of ice cream place the sections of an orange, top with a cherry and sprinkle with Mexican pecans. Serve with Mexican pecan wafers and a small spoon. Price, 15 cents.

Pell Mell

Take a navel orange, remove the peel and cut the orange into small cubes; cover the cubes with powdered white sugar and freshly grated cocoanut; let the mixture stand for two hours when it will be ready for use. In the center of a salad dish place a dipperful of vanilla ice cream and orange ice, half-and-half, placing at either end of the dish a small dipperful of sweet, whipped cream and cover with the orange and cocoanut mixture. Top off the center cone with a Maraschino cherry and each of the whipped cream cones with the half of an English walnut. Sells readily for 20 cents. (Ralph Hilligass.)

Tango Ice

Into a fancy saucer place a slice of orange. Over this place one five-cent disherful of orange ice. Top with a maraschino cherry. Place nuts around the outer edge of the glass. The color-scheme of this dish is about as near as one can come, while working with soda-fountain products, to the now popular "tango" shade, and for this reason it makes a special appeal to customers of the fair sex. The price is 15 cents. (Harry Crum.)

Daisy

From the center to the edge of a dainty wafer dish, about six inches in diameter, place thin slices of banana so as to represent the petals of a flower; over the center of this place a large dipperful of vanilla ice cream and over the cream pour a dipperful of strawberry syrup and sprinkle on a few crushed nuts, and the sundae will closely resemble a daisy. Price, 15 cents. (J. Harold Searls.)

Bryn Mawr (colors gold and white)

Split a banana lengthwise, place in a suitable dish and cover it with vanilla ice cream. Around the edges of the dish place slices of orange and top off with grated cocoanut. Price, 20 cents.

Omar Sundae

Fill an 8-to-the-quart cone rounded full of ice cream, place it in a champagne glass and pour over it a small ladle of the crushed fruit. Take half a banana and peel it, cut into thin slices and place around the sides of the cone.

Runabout

Put large measure of ice cream in a tall sundae glass, cover with fresh crushed banana fruit and fill the glass with whipped cream. Place on one side maraschino cherries. Other fruit may be used if desired.

Tallyho

Put a large dipperful of vanilla ice cream into a tall sundae dish, cover with freshly crushed banana fruit and fill the glass with whipped cream. Cover the top of the mixture on one side with chopped pecans, and on the other side sprinkle powdered mace. Top with maraschino cherries or other fruit, as may be desired. Charge 15 cents.

Pineapple Freeze

Fill sundae cup two-thirds full pineapple ice, then fill up with pineapple crushed fruit. Top off with sliced pineapple and orange and chopped brandied cherries.

Maraschino Pineapple

Over ice cream in sundae dish pour maraschino pineapple.

Walnut Pineapple

Make a regular sundae with crushed pineapple and top with a spoonful of whole or chopped walnut meats. Price, 10 cents.

Havana

Over half a slice of pineapple in a fancy saucer place a cone of ice cream. Top off with two or three cherries, whipped cream and nuts. Charge 15 cents.

Mount Vesuvius

Take a scoopful of strawberry ice cream and a scoopful of vanilla ice cream and over them put some fresh pineapple syrup. Decorate with one or two marshmallows and then pour on a ladleful of marshmallow cream; top off with several Maraschino cherries. Price 15 cents.

The author is of the opinion that if more druggists and confectioners would encourage the sale of fancy sundaes they would find a greater profit and 5-cent sundaes would be seldom called for. (Gilbert Crawford.)

Pineapple Snow

Pineapple snow is a mixture of shaved or cracked ice, cream and pineapple syrup with or without carbonated water, the whole being topped off with shaved ice and dispensed in a glass with a spoon.

Pink Lady

Place in a fancy sundae dish ½ ounce of pineapple syrup, then add a No. 16-to-the-quart dipperful of vanilla ice cream. Over this pour a small ladleful of whipped cream previously colored a pink tint by the incorporation of a small quantity of strawberry syrup. Top with a maraschino cherry or some chocolate-dipped peanuts. Sells for 10 cents. (P. H. Kutz.)

Sunshine

Put into a sundae glass or dish one ladleful of pineapple sherbet. Place on top and down four sides of the sherbet whipped cream, putting grated pineapple over the whipped cream and topping off with a Maraschino cherry.

Pineapple sherbet is made as follows: Water, 3 quarts; sugar, xxxx, 6 pounds; 6 pineapples cut very fine; solution of citric acid, 1 ounce. Dissolve the sugar in the water, add the other ingredients and the white of one egg, pass through a fine hair sieve, strain into a freezer and freeze. Canned pineapple may be used in place of the fresh fruit, one can of pineapple being taken in place of two pineapples. (Walter Luick.)

Hawaiian Beauty

Into a glass sundae dish place one 12-to-the-quart disherful of pineapple sherbet and cover with a ladleful of fresh strawberries. Top off with a spoonful of whipped cream and a cherry.

Pineapple Prince

Put pineapple fruit in ice cream dish, place cone of ice cream on the fruit, pour a small quantity of Roman punch syrup over it, and top off with violettas or rose petals. Charge 15 cents.

"Co-ed"

Serve in a fancy sherbet glass. Place one measure of lemon nut sherbet in the glass; pour over it one ladleful of crushed pineapple, and top off with a whole red cherry.

Automobile

On a 6-inch plate put a nabisco wafer over which place a No. 20 disherful each of orange ice and vanilla ice cream; then pour over them an ounce of crushed pineapple. Decorate with four candy cream wafers used as wheels, two maraschino cherries to represent lights, using a toothpick to hold them in place, and top off with whipped cream and a few ground or powdered nuts. Place a candy figure on the finished sundae to represent the driver. Should sell for 25 cents. (Ed. Mockler.)

Pineapple Pie

Place a large slice of pineapple on a small china plate and upon this put an 8-to-the-quart dipper of vanilla ice cream. Imbed three pineapple red aces or hearts in the cream and top with vanilla marshmallow upon the crest of which is placed another pineapple ace or heart.

This makes a handsome, appetizing sundae and is a winner. Charge 15 cents. (E. J. Howard.)

Blueberry Dream

Buy one quart of blueberries, wash them thoroughly, then pour over them 1½ pounds of sugar. Let the mixture stand for three hours, then add to it six bananas sliced, and two quarts of simple syrup. Mix well in a glass bowl and proceed as follows: In a sundae cup put one disherful (20-to-the-quart) of strawberry ice cream and one of pineapple water ice; over these put a ladleful of the blueberry mixture and a few chopped nuts. Then cover with some marshmallow cream, surmounting all with a lady finger placed between a green and red cherry.

The author states that he has no trouble in selling this mixture for 15 cents, and it is a new use for blueberries. (Clinton W. Waldorf.)

Nut Apricot

Into a sundae glass turn a cone of ice cream. Over the top of the cream stick a few hickory or walnut meats broken into small pieces. Over all pour an ounce of strong apricot syrup and serve with a spoon.

Merry Countess

One No. 20 ladle each of vanilla and strawberry ice cream in a sundae dish. A ladle each of crushed pineapple and strawberry. A small quantity of sliced bananas. Top with whipped cream and a red and green cherry. Sells for 15 cents. (Don C. Vann.)

Nougat Frappe Sundae

Into a 7-ounce high-ball glass put a No. 16 disherful of strawberry ice cream; over the strawberry cream put one ladleful of nougat frappe dressing; then add a No. 16 disherful of orange frappe, and then top off with a liberal supply of nougat frappe dressing, a few pecan halves and a maraschino cherry. Sells for 15 cents. (C. Lawson Hughes.)

Roof Garden Favorite

In a stemmed sundae glass put a spoonful of crushed peaches, then a small ladleful of ice cream, and over all sprinkle some ground nuts. Nearly fill the glass with whipped cream and finish with hot claret syrup.

September Morn

Into an 8-ounce goblet place 3 ounces of white grape juice; float on the juice a ladleful of whipped cream and on top of the whipped cream put a No. 12 disherful of strawberry ice cream. Now insert two veronique wafers opposite each other in the ice cream next to the glass. Decorate with maraschino pineapple and cherries, and pecan halves arranged artistically. Price—15 or 20 cents. (Fay W. Fraker.)

Sea Foam

Shake up separately the yolk of an egg with 1 ounce of orgeat syrup, and beat the white with some powdered sugar. Put a cone of peach ice cream in a sundae cup, pour around it the beaten egg white, putting in the center the syrup and yolk, and serve. Charge 15 cents.

Salamander

Ginger cordial syrup, mix with ginger fruit, pour over vanilla ice cream and sprinkle cinnamon on top. Serve in sundae cup and top off with maraschino cherries. Vanilla syrup may be used in this formula and crystallized ginger cut up in it.

Fruits and Flowers

A glass basket is filled with peach ice cream covered with slivers of fresh fruits. A wreath of crystallized violets is placed around the edge of the peach cream. On top, place a rosette of vanilla whipped cream in the center of which put a preserved or candied strawberry. At this season of the year, the author states, preserved fruits may be used. The glass basket is served on an ice-cream plate, regular size, on which a fancy paper doily mat has been placed. The glass baskets can be bought for 10 cents apiece. The combination, the author says, can be sold for 20 cents. (Edward Pennock.)

"Roosevelt" Special

At one end of a split banana dish place a No. 12 ladleful of strawberry ice cream, and at the other, a No. 12 ladleful of vanilla ice cream, which is to represent an iceberg, the strawberry cream representing a ship. Decorate the vanilla cream with crushed pineapple fruit, and the strawberry with red raspberries and chopped nut meats. Place two nabisco wafers on edge, one on either side of the strawberry ice cream, and pointing toward the vanilla cream. Also put two nabiscos in a vertical position on the strawberry cream to represent sails. Serve with a spoon and glass of water.

To advertise this delicacy the author used short window strips which read:

Try Delicious
"Roosevelt" Special, 15c.

The "Roosevelt" was the ship used by Admiral Peary on his voyage toward the North Pole. (Kenneth E. Paul.)

Perfecto

Into a fancy ice cream dish place a disherful of vanilla-strawberry-chocolate ice cream, and over it pour a small ladleful of strawberry, pineapple, and peach fruits; then add a small quantity of claret and champagne syrups, a ladleful of chopped walnuts, a teaspoonful of whipped cream, and put a red cherry on top. Serve with a napkin and a glass of ice water. Sells for 10 cents and "costs only five if made right." It might well be priced at 15 cents.

The author states that "this is a big seller and every patron likes to tell his friends about it." (Edwin H. Shortiss.)

Oriental Fruit Sundae

Into a sundae dish put a small spoonful of lychu nuts and cover them with a No. 10 to-the-quart disherful of vanilla ice cream; add ½ ounce of vanilla syrup; place half way round the base of the ice cream a sprinkling of ground figs, completing the circle with a sprinkling of ground dates. Top with a sprinkling of ground nuts and a cherry. Sells for 15 or 20 cents.

Fluffy Ruffles

Take two cones of ice cream, 20 to the quart, and put one ladleful of marshmallow sauce, chopped walnuts and a red cherry on one cone, and one ladleful of raspberry fruit, chopped pistachio nuts and a green cherry on the other cone. Serve on a pickle dish. The walnuts and pistachio nuts should be chopped in a meat chopper and not cut too fine. Where green cherries with vegetable color cannot be procured, use two red cherries or one red and one white cherry.

The author states that "'Fluffy Ruffles' is a pretty dish. Its appearance will cause people to try it who never saw or heard of it before. It is a big favorite at our fountain." It is worth 15 cents. (D. Charles O'Conner.)

Old Grey Bonnet

Place in a colonial sundae cup one cone (No. 8 disher) of caramel ice cream; around the base of the cream arrange at regular intervals cubes of pineapple, orange and Maraschino cherries. Take a whole slice of pineapple with a hole in the center and fit it down over the top of the cone. This will represent the bonnet. On the pineapple put a ladleful of whipped cream, vanilla flavored, and top off with a green cherry.

The song "Put on your old grey bonnet" was very popular in Lincoln, Nebr., the author's city, when he originated this sundae, and he advertised it by taking the picture off the music and pasting the word "sundae" after "grey bonnet" in the title. It sells for 20 cents. (Fay W. Fraker.)

Hobble

Into a fancy sundae glass put a scoopful of caramel ice cream and over it sprinkle some ground nuts; cover with a little whipped cream, putting on the latter a little pink marshmallow. Now around the cream and in such a position that the ends will come to a point stand four lady fingers, topping off with whipped cream and surmounting the whole with a cherry, the latter being flanked on each side with two pieces of pecan meats.

The author states that "this sundae made according to the above formula is not only artistic but very delicious when correctly made." Sells for 20 cents. (Justin Loubere.)

Goo Goo

Ice cream, 1 large ladleful; nut frappe, 2 ounces; stir together thoroughly, cover with whipped cream and trim with Maraschino cherry and cut pineapple.

Creamed Fig

Take a dish full of chocolate ice cream (or a dish of vanilla ice cream with a layer of chocolate syrup over it). Over this place a spoonful of crushed figs and a large spoonful of whipped cream, putting on each side a Nabisco wafer. Serve in a sherbet glass with a spoon, topping off with a Maraschino cherry.

Regarding this formula, the author says: "On account of the popularity of figs and the great number of people who eat figs for so many different purposes, this formula is a trade winner." Charge 15 cents. (Patrick McCole.)

Baltimore Belle

Make a syrup of 1 orange, 1 peach, 1 banana, ½ pineapple, 1 ounce strawberries, and enough simple syrup to make one-half gallon. Leave the peel on the oranges and cut into cubes, peel the banana and peach and cut into cubes, grate the pineapple and crush the strawberries. Add the syrup and color the mixture pink. To serve put ice cream in the bottom of the glass. Add one ounce of the above topping.

Cabaret

Place in a suitable dish one ball of pistachio nut ice cream (green), and one ball of frozen pudding (pink). Pour over the ice cream cabaret dressing, and then stick a toothpick in each ball of the cream, placing on one of the toothpicks an olive and on the other a red cherry. Drop six roasted and blanched almonds around the base of the cream, and shake over all one tablespoonful toasted cocoanut.

The "cabaret dressing" is made as follows: Take 1 quart pure maple syrup, ¼ pound cut seeded raisins, ¼ pound cut figs, mix, and bring to a boil; cool, add ½ pound cut Malaga grapes, mix well, and use as a dressing. Charge 15 cents. (C. I. Hadley.)

Oriental Delight

Take a fancy stem glass, holding about 4 ounces, and in it place a No. 20 dipperful of vanilla ice cream, add a ladleful of chopped figs which have been previously soaked in maple syrup, then a sprinkling of ground nut meats, and a dipperful of equal parts of pistachio ice cream and orange ice. On top place a spoonful of whipped cream, then a chocolate Maraschino cherry; on each side put a red cherry, and serve with the glass on a fancy plate. The fact that chopped figs are used in the preparation of this beverage makes the name "Oriental Delight" particularly appropriate. Charge not less than 15 cents. (Geo. W. Eldon.)

Fig Special

Take three small preserved figs, cut them in half, and lay the halves on a small plate; add one No. 12 dipperful of vanilla ice cream, a spoonful of fig syrup and sprinkle with chopped nuts; top with whipped cream and cherry. Sells for 20 cents. The author, a dispenser in the Hawaiian Islands, states that the figs can be bought in 2-pound packages or in 1-gallon cans. (Hazel P. Wilson.)

Old Virginia

Into a tall flaring stem glass place a No. 16 dipperful of strawberry ice cream and add in the order named, a small ladleful of red raspberry fruit, a No. 8 dipperful of pineapple ice, and top off with whipped cream and a chocolate-covered Maraschino cherry. Sells for 15 or 20 cents. (Robt. Landis.)

Bulgarian

Into a high sundae glass of cylindrical shape place a teaspoonful of vanilla ice cream; over this pour creme de menthe syrup (which is green); then add a teaspoonful of chocolate ice cream, on top of which place a little crushed strawberry fruit; now add a teaspoonful of maple nut ice cream, and top the whole with two slices of peaches and one cherry, thus reproducing the colors—white, green, brown, red-tan orange, and red. The author writes that this sundae is named after the popular Bulgarian colors, and "would seem to be a big sundae to sell for 10 cents. But the capacity of this kind of sundae dish isn't much, and by using a spoon instead of a ladle for measuring out the various ingredients the sundae may be sold at a good profit." (Miss Louise Heinze.)

Fruited Sundae

Mix together ¼ pound ground roasted almonds; ½ pound candied cherries cut in halves, and 1 pint fresh crushed strawberries. Mix with 1 gallon of vanilla ice cream, pack in ice and salt, and allow to stand 3 hours. To serve, place one No. 10-to-the-quart scoopful of the fruited ice cream in a sundae cup and pour over it a ladleful of cherry juice. Sells for 15 cents. (T. Louvis.)

Turkish Delight

Into a sundae cup place one-half scoopful each of pistachio ice cream and orange water ice. Over these pour a ladleful of Turkish Delight mixture and a few ground walnuts; top off with whipped cream and a whole green fig, sprinkling a little ground nutmeg on top of the cream. Place the sundae cup on a saucer and serve.

The Turkish Delight mixture is made by taking candied citron, 1 pound; preserved ginger, 1½ pounds; water, 3 pints; simple syrup, 3 pints; and strawberry crushed fruit, ½ gallon. Run the citron and ginger through a food chopper equipped with the fine knife cutter, place the mixture in a suitable vessel and add the water and syrup. Cook the mixture slowly over a fire for about half an hour, stirring occasionally to keep from burning; then add the strawberries; a few drops of red vegetable color may also be added if the mixture is not dark enough. Whole figs can be bought from any grocery store.

The author states that when he first thought of asking 25 cents for this sundae he was afraid the price would scare everybody, but he took a chance and on the Saturday previous to submitting the formula he sold forty-one of the sundaes, which made quite an addition to his receipts for that day. (Clinton W. Waldorf.)

Frou Frou

In the bottom of a four-inch glass saucer having a handle, lay three "frou frou" wafers, their ends touching so as to form the outline of a triangle. In the center of the triangle put a No. 8 cone of vanilla ice cream, which will hold the wafers in place. Pour over all one ladleful of crushed raspberry, filling in the three corners left by the wafers with chopped Brazil nuts. Then add a ladleful of whipped cream, three walnut halves and a Maraschino cherry on a toothpick. Now lay a fern leaf on a six-inch fancy plate and on it place the saucer containing the sundae. Serve with a glass of water and a paper napkin.

"A good seller at 15 cents the year round." (Raymond J. Williams.)

Brooklyn Bridge

On an oblong dish place two (No. 16) scoopfuls of chocolate ice cream, one at each end of the dish. Over each cone of ice cream scatter a few chopped pecans and top with a little whipped cream, being careful to leave the space between the ice cream cones vacant. Then fill this space with mint syrup; connect the two cones of ice cream with a half slice of orange. The chocolate ice cream cones represent the banks of the river, the mint syrup the water, and the orange, the bridge. Charge 15 cents. (Pendel Poledor.)

Vermont

Take a saucer, such as are commonly used for sundaes, and around its edge place 5 macaroons. Place a cone of vanilla ice cream (measured out with a 12-to-the-quart ice cream disher) in the center of the saucer. Over the ice cream pour ½ ladleful of pineapple fruit and 1 ounce of maple syrup. Top off with a small measure of maple sugar. Charge 20 cents or more.

Riker-Hegeman's Parisian

Made of vanilla ice cream served with chocolate sauce, with a layer of sliced bananas, a dash of chopped walnuts and a toothsome, red cherry on top.

"Nothing more delicious and nourishing could be served even though you bought it as a fancy ice cream in a great restaurant and paid 30 or 40 cents for it. Try our Parisian Sundae this week." Price, 15 cents.

U-Wana

In a six-inch dish place a scoop of vanilla ice cream, one of strawberry and one of chocolate (20 to quart), round-bowl shape. In the center place half a Bartlett pear. Top off with a teaspoonful of whipped cream, sprinkle a few crushed pecans. Top each mold with a cherry pierced with a toothpick. Price 20 cents.

To advertise the "U-Wana Sundae" place a card to read:

SPECIAL TODAY
"U-WANA SUNDAE"
20 Cents.

This feature might well be priced at 25 cents. (Theo. Louvis.)

Bisque Blush

At the bottom of a cocktail glass place a scoop of bisque ice cream. Cover with a spoonful of crushed pineapple and chopped nuts, followed by a layer of orange sherbet. Top off with a spoonful of claret syrup, so placed that it will trickle down the glass and produce a pretty effect, whipped cream and Maraschino cherries, selling for 15 cents. (Clarence Bess.)

Bridal Path

Take six bananas, crush and mix them with 1 quart jar of cherries, and 1 pound of walnut meats. To serve, take a banana split dish and into it put a No. 16-to-the-quart dipperful of vanilla, peach and banana ice cream. On top of the cream and close together lay lengthwise two Cameo wafers. Cover with the mixture of bananas, cherries and walnut meats, and place at each end a cherry. With each sundae when served give a spray of lily of the valley (artificial). Sells for 20 or 25 cents. (Peter Eichelman.)

Military

One dipper of ice cream, sliced orange cut in diamond shaped pieces, sliced pineapple cut in triangular shape, whole English walnuts, maraschino cherries, the nuts and fruits to be arranged artistically. No syrups are used. Charge 15 cents.

Dunce Cap

In a regular sundae glass place a ladleful of fresh raspberries, cover with raspberry whipped cream, over the whipped cream lay a few walnut halves and a sphere of vanilla ice cream. Then fill a small ice cream cone with raspberry whipped cream and place on the sphere of cream so as to form a cap.

To make raspberry whipped cream, take one quart of heavy cream and whip until almost stiff, pour in one-half teacupful of crushed raspberries and whip until the mixture becomes stiff. Price, 20 cents. (Sterling Miller.)

Dunce Cap Sundae

On a sundae saucer or dish put one spoonful of whipped cream, pressing it into a circular shape. Upon it place one large-sized *cone-shaped* disher of vanilla cream. Press the ice cream down so as to form a roll or ridge of whipped cream all around the base of the cone. Stud the ice cream with choice currants, top with a fresh cherry, and sprinkle over with a spoonful of chopped roasted almonds. Sells for 15 cents. (C. Bassman.)

Special Matinee

Take a tall-footed sundae glass, place in it a 16-to-the-quart dipperful each of chocolate and vanilla ice cream, and pour over the top of each a ladleful of the following dressing: Marshmallow, 1 quart, plain syrup, 1 pint, and enough concentrated blackberry and old rose to color and flavor. Then mix in ¼ pound each of chopped walnuts and pecans. Sells for 10 cents.

To advertise the sundae, the author makes use of the following ad, which he has found of direct value as a trade promoter, in that it excites interest as relating to something new, without going too deeply into details as to what the Matinee Sundae really is:

On Saturday we will serve a
Special MATINEE Sundae that
will be a pleasure to take in.
Something smooth and so delicious that you will enjoy it from
beginning to end.
(Three Acts)
Be Sure to Attend.
Tell Your Friends.

(C. E. Wilber.)

Souvenir

Serve in a tall stem frappe' glass a No. 16-to-the-quart dipperful of vanilla ice cream, putting over the ice cream a ladleful of a mixture consisting of chopped figs, fresh sliced peaches, crushed pineapples, whole strawberries and fresh orange fruits; top with whipped cream and a wafer. Serve with the sundae a small silver spoon, which may be bought in gross lots for four cents apiece. The customer may keep the spoon as a souvenir. Price of this feature would necessarily vary considerably. It might be 20 or 25 cents. (Sterling Miller.)

Rigoletto

Over a ladle of peach ice cream pour a sauce made of the following: One pound of mixed nuts chopped fine, mixed with 1 pint of rich maple syrup.

Epicurian

Place a tall cone of strawberry ice cream in a flat dish, pour a little grape syrup and a little "champagne syrup" around the bottom; add two slices of peach, and on top of the cone balance a thin slice of pineapple topped off with an arabesque dab of whipped cream and a red cherry. Charge 15 cents.

Flirting Princess

In a highball glass place a scoopful of vanilla ice cream, covered by half an ounce of grape juice. Add several teaspoonfuls of chopped bananas and syrup and cover with a layer of strawberry ice cream. Top off with whipped cream and cherries and serve for 15 cents. (R. J. Reynolds.)

Club House

Peel six bananas and one pineapple, slice and cut the pineapple into small cubes; cut the bananas in thin slices and put both fruits into a fruit bowl. Sprinkle with as much sugar as the fruit will take up and place on the ice until the sugar is dissolved. Then add about three dozen Maraschino cherries and mixture is ready for use. This should be prepared, small quantity at a time, so as to keep fresh.

Take one-half cone each of strawberry and vanilla ice cream, place in a six-ounce sundae cup, and pour on a ladleful of the above mixture. Be sure to get about three cherries neatly placed on the top and finish with whipped cream. Can be served without the whipped cream. If served with whipped cream it should bring 20 cents. (James L. Humble.)

Mystery Mix

Put one ladleful of vanilla, chocolate and strawberry ice cream, mixed, into a sundae glass, over which pour rainbow sauce, topping off with whipped cream. Rainbow sauce is made as follows: Chop fine one pound of candied cherries, one pound of pineapple, one-half pound each of candied citron, apricots and pears, and a few pistachio nuts; mix all well together and boil in enough simple syrup to make a nice dish. Pour one ladleful of this mixture over the mixed ice cream. Price, 15 cents. (W. Luick.)

Florida Mixture

The Florida Mixture consists of one ball of orange ice, one-half dipperful of crushed strawberries and one-half dipperful of crushed pineapple. Top off with a cherry on a toothpick. Charge 10 cents.

Free Lunch

Take a deep sundae dish, one that will hold two disherfuls of cream, and put in one disherful of vanilla ice cream. Over this put some chocolate syrup, a few pieces of sliced bananas and a half teaspoonful of malted milk. Now put in another disherful of vanilla cream and cover with chocolate syrup. Place sliced bananas all around the top with a spoonful of chopped pecans over all. At the top, in the center, place a Maraschino cherry with a toothpick through it.

"This delicacy sells readily for 15 cents and is a trade winner. Of course, you must use your judgment in the making and not be too liberal, because if you are careful you can make a good per cent of profit on each sundae. This one has been especially popular with the students in our neighborhood." (W. Arthur Golding.)

Skyscraper

Place two small scoopfuls of vanilla ice cream on a china platter; over the ice cream pour cherry syrup with cherries and place a Nabisco wafer over the cream; then add scoopful of strawberry ice cream, placing it on the middle of the Nabisco wafer; place another Nabisco wafer on top of the strawberry ice cream so that it will balance evenly and top off with whipped cream and a whole cherry. Charge 20 cents. (Sydney Trau.)

Commodore Perry

Into a large sundae dish place a large dipperful each of strawberry, vanilla and French vanilla ice cream, putting crushed strawberries over the strawberry ice cream, crushed pineapple over the vanilla ice cream, and grape juice over the French vanilla ice cream. Top off with whipped cream and red cherries. Sells for 15 to 20 cents. (H. Bayless.)

Queen

Pour over ice cream mixed blackberries and grated black walnuts and top off with two whole strawberries. Or, pour over ice cream the same mixture as in the preceding, adding a little powdered cinnamon and syrup of raspberry vinegar.

This sundae may also be topped with marshmallow.

Militant Hope Sundae

Use a small neat china or cut glass plate. Upon it in triangular shape arrange three cones of ice cream—strawberry, chocolate and vanilla flavors respectively. Upon the strawberry ice cream place a white cherry; upon the chocolate ice cream put a pineapple cube, and upon the vanilla ice cream put a whole English walnut. Fill the center with shredded cocoanut and on it place a thin slice of orange. Decorate the edge of the plate with whipped cream and half pecans. Charge 15 cents. (Clinton B. Ellis.)

Cubist

Cut into cubes equal parts of oranges, pineapples and bananas; mix with fresh strawberry syrup, and add one pint of chopped nuts to each two quarts of the mixture. To serve, use a No. 1½ cube-shaped sundae mould. Fill the mould with alternate layers of chocolate and vanilla ice cream, then empty out on a small hexagonal plate. Pour over the cream a ladleful of the "cubist art" mixture, and top with whipped cream and a cube-shaped piece of orange or pineapple. This is a good seller at 20 cents.

The author writes that he uses "cubist art" drawings to advertise this specialty. (Philip W. Fraker.)

Silver Sundae

Make a thin paste of marshmallow whip, which pour over a cone of ice cream (No. 12-to-the-quart dipper); sprinkle over with cocoanut, and top off with marshmallow. Sells for 15 cents.

The author of this formula asserted that "this sundae made a great hit with our trade and we gave a silver spoon with each dish."

Mexicana

Put a dipperful of vanilla ice cream on a sundae dish and cover with a dressing made by mixing equal parts of pecans, pignolia nuts and pistachio nuts, chopped together, and a sufficient quantity of heavy caramel syrup.

Ding-a-Ling

Take a 6-inch fancy flat glass dish and place on it a large (10-to-the-quart) cone-shaped dipperful of vanilla ice cream. Then pour a small ladleful of crushed orange around the edge of the ice cream and over it put a small ladleful of crushed strawberries. Cover with whipped cream, dashing a little of it extra heavy on one side to imitate a feather.

The author says the name was suggested to him from the fact that in his city the ladies were all wearing the style of covering for the head known as "ding-a-ling" hats. Charge 10 cents. (Ed. C. Swain.)

Dutch Treat

To dispense a "Dutch Treat" sundae make a frozen fruit cream consisting of three bananas freshly cut, 1¼ pounds of sugar, 7 ounces of chopped walnut meats, 1 ounce of vanilla extract and 7 ounces cut cherries for each gallon of cream desired.

As a base in dispensing, use four frou frou wafers, over which sprinkle chopped Brazil nuts, add one ladleful (size No. 8) of fruit cream, circle the top with pecan halves, add a dash of caramel whipped cream and one creme de menthe and one Maraschino cherry. The frou frou wafers used in this sundae are imported from Holland, hence the name "Dutch Treat." Charge 15 cents. (Raymond J. Williams.)

Triple-Fruit

Into a sundae glass put a No. 16 disherful of ice cream, pour over it a ladleful of crushed pineapples, then hollow out a No. 6 cone of ice cream and place it on top of the ice cream first put on the dish. Cover this with crushed strawberry and decorate with Maraschino cherries.

The author says this makes a desirable and showy sundae and can be made from the material or supplies on hand at any fountain, large or small. (Chester Schlabach.)

Mexican Special

On a large sundae dish place a No. 16-to-the-quart disherful of Mexican pecan ice cream, cover with penoche sauce and then with whipped cream, adding some jelly beans to represent Mexican beans.

Mexican pecan ice cream is a maple cream with which pecan nut meats have been incorporated. Penoche sauce is made as follows: Mix together 4 pounds brown sugar, 1½ quarts of sweet cream and ½ pound glucose and boil for three minutes, being careful not to scorch the mixture. Let cool, and when cold, stir in chopped pecan nut meats. Sells for 20 cents. According to the author, this special has been a trade-winner in Los Angeles. (W. G. Turner.)

Festino Almond Nut

Into a tall Buffalo glass put one 16-to-the-quart ladleful of ice cream, over the cream put a ladleful of crushed cherries and caramel nut fudge. Then place a ladleful of ice cream on top and arrange 6 festino almonds around the cream. Top with whipped cream and a red or green cherry. Sells for 15 to 20 cents. (W. H. Marsh.)

Fruit Cocktails

Chopped and iced fruits, commonly known as "fruit cocktails," always find favor with children, and may be substituted for the richer frozen creams. Shredded pineapple and ripe bananas, sliced and mixed together with pulverized sugar, may have poured over them a little lemon or orange juice and then be set in a refrigerator to ripen, time being given for the various fruit flavors to combine. When ready to serve fill sherbet glasses with chopped ice and add a couple of spoonfuls of the shredded fruit with the juice formed around it. Charge 10 cents.

Uncle Jake

Place a cone of ice cream on a dish around the edge of which lay three vanilla wafers flat, the wafers marking the points of a triangle; now put a slice of banana at each point where the cakes join together, placing crushed peaches on one side of the dish and crushed strawberries on the other. Sprinkle a little chopped nuts over the ice cream, and top off with whipped cream and a cherry. Price, 15 cents.

Mahomet

Take of fresh figs, 1 pound; dates, 1 pound; English walnuts, 1½ pounds; pistachio nuts, 1½ pounds; raisins, 1 pound. Put all through a meat grinder and when well ground and mixed add ½ gallon maple syrup. Boil in a porcelain kettle until the mixture is reduced in volume to a heavy, thick liquid. When it has become cool add ½ ounce vanilla extract and color a dark brown with sugar coloring.

To serve, place a No. 10 dipperful of ice cream in an oblong dish, over the cream put some of the Oriental mixture and top with burnt almonds, whipped cream, colored a light green and flavored with pistachio, and a Maraschino cherry. The burnt almonds can be run through a grinder and put on a tin lid held over a gas range until roasted a light brown, the almonds being kept from burning by a movement similar to that employed in making popcorn; 15 cents. (Ellis N. Rowe.)

Fruit Pudding

One-half ounce crushed strawberries, ½ ounce crushed peaches, ice cream to fill small glass. Serve with spoon. Charge 15 cents.

Hippodrome

In a sundae dish place a scoopful of chocolate ice cream, one of orange sherbet and one of cherry nougat. Cover this foundation with a layer of chopped bananas and top off with whipped cream and cherries, selling for 15 cents. This combination may be advertised by the phrase, "See all the colors of the Hippodrome in our Hippodrome Sundae." (R. J. Reynolds.)

Honolulu Fruit

Take one scoop of vanilla ice cream, one scoop strawberry cream, one dipper of strawberry fruit, one round slice of pineapple and top off with whipped cream and a cherry.

Honolulu Fruit Frappe
15 Cents
ONE CALLS FOR TWO

Joy

Into a silver sundae cup place a cone of vanilla ice cream and raspberry ice, a ladleful of joy fruit, and decorate with whipped cream and one cherry. To prepare the "joy fruit," take two bananas, two oranges, a cupful of fresh strawberries, and a cupful of raspberries and cut and chop up very fine. Put into a suitable dish, cover them with a half pint of whipped cream and stir all well together. Sells for 10 cents.

Royal Salad of Fruits

Take 1 gallon of rock-candy syrup and flavor with a little N. E. rum, then add the following ingredients: Strawberries, 1 quart; maraschino pineapple aces, 1 pint; ripe cherries, ½ pound; pecan halves, ¼ pound; oranges, 2; Spitzenberg apples, 2; and one fresh pineapple, each of the fruits being sliced in cubes. Add a pint of maraschino cherries, and mix all of the ingredients named in the syrup and let it stand for two hours. Serve in a parfait glass, using a No. 16-to-the-quart dipperful of ice cream, covering it with the salad and topping off with whipped cream. Price, 15 cents.

Glaced Nuts

In an ordinary sundae cup place one 12 to the quart disherful of vanilla ice cream. Pour over this 1 ounce of double chocolate and 1 large spoonful of ground glaced nuts. Top with a Maraschino cherry.

"Double chocolate" for the above is made as follows: To half a gallon of boiling water add 1 pound of any good fountain chocolate. Stir and boil for two minutes, then add 6 pounds of granulated sugar and 1 can of condensed milk. Boil the mixture a minute longer, remove from the fire and strain; when cold, add 1 ounce of vanilla extract. The chocolate is then ready for use.

"Glaced nuts" are made by placing in a kettle 4 pounds of granulated sugar, 1 quart of water and 1 pound of glucose (or 1 level spoonful of cream of tartar). Bring to a good stiff boil and add 2 pounds of shelled almonds. Stir constantly until the nuts are brown. Remove from the fire and pour into a sieve or colander. When the syrup has drained off pour on a greased slab of marble or into a pan; when cold, pass through a food chopper and put into a glass jar for future use.

The author says: "This formula may seem a bit complicated, but after making the first batch it will be found to be very simple. Glaced nut sundae is original with me and is the biggest hit I have had in my ten years' experience back of the fountain counter. I would suggest that glucose be used, if convenient; if not, cream of tartar works nearly as well, but care should be taken to wash down the sides of the kettle with a wet cloth, as if this is not done the batch may 'grain.' I use small shelled almonds which can be bought of any supply house. The syrup drained from the batch should be saved, as it can be remelted and to it added more stock for the next batch." (Lew. S. Snyder.)

Tower of Babel

A mold about 4 x 3 x 1½ inches is preferred, but any other size will answer. Put 2 red and 2 green whole Maraschino cherries in opposite corners of the mould and a thin round slice of an orange in the center; now fill the mold with two different kinds of cream. Place 2 Nabisco wafers on a china platter and empty the contents of the mold on the wafers. To take the cream out of mold, cut around the sides with a knife.

"This sundae is very appetizing and neat looking if made right and is a sure winner." (Sydney Trau.)

Town Talk

Place in a footed ice cream sundae cup 1 cone (No. 12 disher) of strawberry ice cream, and around the base pour 1 ladleful of "fruit mix;" in the top of the cone place 1 Maraschino cherry and finish with a small ladleful of claret syrup, extra heavy. Charge 10 cents.

To make "fruit mix" for the above: Take a small cupful of chopped oranges, a similar quantity of seeded raisins and 2 ounces each of coarsely ground walnuts and pecans, and a sufficient quantity of extra heavy maple syrup to make 1 quart. Put the fruits and nuts in the maple syrup and boil to a heavy syrup. (G. W. Irwin.)

Sweet Heart

Into a sherbet glass place a cone of vanilla ice cream; over this pour a spoonful of caramel syrup (made from best pure caramels and rich cream or heavy cream); on one side of the glass place a spoonful of crushed walnuts. Serve with a spoon and on the top in the center place a Maraschino cherry.

The author says: "'To appeal to the taste it must be attractive to the eye' is a very true saying. There is no sundae that is more attractive to the eye than 'sweet heart sundae' when properly served. It is a very popular dish with the ladies and a sundae that brings the people to your store." (P. W. McCole.)

Sundae a la Escoffier

Place a cone of lemon ice in a sundae cup, arrange fresh strawberries over it; pour over all some grape juice and sprinkle with vanilla sugar.

Cupid's Delight

Place on a 5-inch plate one slice of red pineapple, cut heart-shaped, one cone of cherry bisque ice cream well filled with broken red cherries(to represent the broken hearts); add a ladleful of crushed red cherries, one ladleful of marshmallow (pink in color), sprinkling over the latter a sundae spoonful of chocolate nibs. Top with a red pineapple heart cut out of the pieces left from the slice of pineapple used in preparing the foundation. Serve with a Valentine napkin. Sells for 15 cents.

The "stock" for making "Cupid's Delight" is prepared as follows: Procure 2-pound cans of sliced pineapples; then make a sherry wine syrup, using 1 quart of sherry wine and 3 quarts of very heavy rock candy syrup. Color a deep red, and in this syrup place the sliced pineapples, and stand in the ice box over night, so that the pineapple will take up the flavor and color. Then cut each slice of the fruit with a heart shaped cookie cutter, and the remaining pieces or what is left of the slices with a vegetable cutter. Make the cherry fruit by mixing 1 pint crushed maraschino cherries, ½ pint concentrated cherry syrup and ½ pint simple syrup, colored red. The chocolate nibs are tiny rolls of sweet chocolate and make a good "finish" when sprinkled on the marshmallow. They can be purchased from dealers in fountain supplies.

The author writes that this is his "Valentine Day Special." To advertise it he uses a 14 x 28 white card on which at the top and center is the reproduction of the head and shoulders of a beautiful young lady (cut out), while around the sides and bottom of the card are pasted red figures of cupids with arrows aimed at "Cupid's Delight." In the center of the card are the words "A Dainty Morsel. A Cupid's Delight Sundae, 15 Cents." (C. L. Hadley.)

Summer Beauty

Take a rather large flat sherbet dish, preferably one with a large stem. Put on it one ladleful of red strawberry ice cream. Put in the center of the cream shredded cocoanut, and top this with a Maraschino cherry. Make a ring around the cream with sliced bananas. When made in this manner the sundae will resemble the form and coloring of a flower. Price, 15 cents. (Forest M. Walters.)

Summer Time

Cut up one banana in slices and place them around the edge of an ice cream plate. Add one measure of ice cream in center of the plate; then put a row of fresh strawberry fruit (or cherries) around the cream, pour on ½ ounce vanilla syrup and ½ ounce strawberry syrup and sprinkle a few nuts on top. Price, 20 cents. (L. W. Marshall.)

Salade de Leux

Into a champagne or tall fluted glass of some fancy kind, put on one side a small portion of lemon sherbet and on the other side put a small portion of vanilla ice cream; then place a ladleful of the salad between the two and top off with shredded whipped cream (whipped cream with shredded cocoanut beaten into it) and a red cherry. Serve with a glass of ice water and two "frou frou" wafers. Can be sold for 10 or 15 cents.

The salad is made as follows: Take 3 fresh eggs and beat thoroughly; then add 2 ounces of concentrated lemon and orange syrups, 1 dram extract of vanilla and 4 ounces sherry wine. Mix all thoroughly together, add ½ pound shredded cocoanut (unsweetened), ½ pound pecan nuts (ground, but not too fine), and enough simple syrup to make ½ gallon. If the ingredients are carefully put together the mixture will possess a fine flavor. Price, 15 or 20 cents. (Guy E. Cla Vell.)

Panama Surprise

Into a banana-split dish place two No. 16-to-the-quart dipperfuls of vanilla ice cream, and add six pieces of cut orange and four dashes of grape juice. Over the whole slice the half of a banana and top off with whipped cream and a cherry. Serve with a glassful of ice water, crackers and a napkin. Sells for 15 cents. (John Lentz.)

Fresh Fruit Delight

In a sundae cup place a ladleful of fresh pineapple fruit, add half a ladleful of oranges cut into small slices, then nearly fill the cup with sliced bananas, placing two maraschino cherries, one directly opposite the other and across the top of the contents of the cup. Put a quarter of a dipperful of whipped cream in the center. Sells for 15 cents. To call attention to his delicacy, the author uses the following sign:

Special Today
Fresh Fruit Delight—15c.
Very fine.

(Paul E. Anderson.)

Astor

Vanilla ice cream, one small cone; ice or special cream, one small cone; Astor salad, one ladleful.

The "Astor salad" is made as follows: Take three seedless oranges, cut in small cubes; two ounces walnut meats, chopped fine; two ounces Brazil or pecan meats; one-half pint crushed strawberries; one-half pint crushed pineapple. Place all in a half-gallon fruit bowl, add one quart of simple syrup, mix together and serve. Price, 15 cents. (Lew S. Snyder.)

Coupe Jacque

Put in a sundae glass one mixed ice with chopped apple, orange, banana, green and red cherries, grapes, peaches, pears, apricots, pineapple and any candied fruits you like. This is best made up every morning in a glass dish. In serving one large spoonful is poured over the mixed ice. Top off with whipped cream from a star-shaped piping bag. Make four small stars and one large star on top and set it off with one red cherry. Fresh fruit makes much the best combination. This dish is very popular at Fuller's Cafe, Ranelagh street, Liverpool. Price in U. S., at least 15 cents. (Fred. S. Longley.)

Cathedral Club

Take a frappe cup, place in it 1 scoopful of vanilla ice cream, flatten the cream and on it put about six slices of banana, then a scoopful of chocolate cream. Surround the last named with a small quantity of claret syrup. On each of the opposite sides of the dish place a slice of peach and on the chocolate cream place three walnut halves. Sells for 15 or 20 cents.

The author states that although he named the above sundae "Cathedral Club" it can be given a name suggestive of any club with quarters near one's place of business. (E. Dean Mattison.)

Fruit Salad a la Mode

On a small plate place a lettuce leaf, over it put a small portion of fruit salad, on the salad put a No. 16 disherful of vanilla ice cream and over the ice cream pour a small ladleful of sliced strawberries in syrup.

In making the fruit salad use the following formula: Four bananas, sliced thin; 2 oranges, cubed; ¼ pound walnuts, halved; 6 Maraschino cherries, chopped fine; 14 strawberries, sliced. Mix all and drain off the juice. This mixture will keep well in a cool place. After the "fruit salad a la mode" is ready to serve, top off with a spoonful of whipped cream and a fresh strawberry. Sells for 20 cents. (H. R. Rowe.)

Frisco Favorite

Place enough vanilla ice cream in a glass to reach a depth of one inch and cover it with crushed strawberries; add 1 ounce of raspberry syrup and 1 ounce of orange fruit and fill the glass with whipped cream. Serve in 14-ounce straight mineral glasses, and dress with whole cherries. Insert a long spoon on side of glass to bottom.

Fandango Sandwich

Place a layer of whipped cream in the bottom of a cocktail glass. Surmount with succeeding layers of chocolate and vanilla cream, covered with an ounce of raspberry syrup. Top off with a layer of orange sherbet, whipped cream and cherries for 15 cents. (G. A. Kenney.)

Bon Bon

A bon bon as served in Norfolk, Va., and other Southern cities is a seven-ounce glass (bell) filled to the brim with shaved ice, the flavor poured on top so it may trickle down through the ice. Place a spoonful of ice cream on side of glass. Both five and ten-cent bon bons are served.

All Together

Take a banana split dish and place on it side by side three 16-to-the-quart scoopfuls of ice cream—chocolate, strawberry and vanilla, the strawberry ice cream in the middle. On top of the chocolate ice cream place a ladleful of crushed pineapple, on the strawberry ice cream a ladleful of crushed strawberries, and on the vanilla ice cream a couple of red cherries with a little of the juice. On the chocolate ice cream place a spoonful of whole walnuts, on the vanilla ice cream a spoonful of whole walnuts, on the vanilla ice cream a spoonful of ground walnuts, and in the center on the strawberry ice cream place a dipperful of whipped cream. Sells for 15 or 20 cents. (John Collins.)

Rose Bud

In an ordinary college ice dish place ½ ounce of claret sauce and on it put a No. 10 scoopful of pistachio ice cream. Flatten down the mixture with the scoop, then cut into four pieces to represent four leaves; in the center of the mass place a ladleful of crushed Maraschino cherries to represent a rosebud, and around the border put maple syrup or dry walnut meats. Sells for 15 cents. (D. G. Bromley.)

Christmas Delight

Take an eight inch plate and place holly leaves around the edges; in the center put a No. 10 dipperful of chocolate and vanilla ice cream. Cover the ice cream with a sauce made as follows: To a quart of cranberries add a quart of sugar and the juice of three lemons and boil all to a nice thick pulp. Top with whipped cream colored pink and flavored with cranberry juice; decorate with a Maraschino cherry and a small sprig of mistletoe. A few holly berries scattered around the margin of the plate add to the attractiveness, while the decorative effect is still further enhanced by using a sprig of mistletoe bearing a berry. Sells for 15 or 20 cents.

The author wrote that this delicacy may be also sold under the name of "Sleigh Bell Sundae" and "advertised with Christmas pictures and branches of holly with a hanging sign or a square sign fitted in a wreath. This sundae made a decided hit in St. Louis." (Ellis N. Rowe.)

Combination

In a sundae dish (China preferred) place one 12-to-the-quart dipperful of vanilla ice cream; over this put a ladleful of butter-scotch dressing; cover this with ground black walnut meats, and top off with a spoonful of chocolate ice cream or chocolate whipped cream and cherries.

To prepare the butter-scotch dressing: Take 1 pound of brown sugar, ¼ pound of glucose or karo corn syrup, and ¼ pound of best butter. Add a little cream (water can be used) and cook to a thick syrup. In boiling, care must be taken to keep the mixture from burning.

The author states that the use of black walnuts and butter-scotch dressing has won great favor for this combination with his patrons. It can profitably be sold at 15 cents, and the name really suggests a happy combination to would-be customers. (R. W. Irwin.)

Robin Hood

In a banana split dish put one disherful of pineapple ice; then place a banana, previously sliced in four pieces, down the sides of the glass. On top of the pineapple ice place a small disherful of strawberry ice cream and over it pour marshmallow paste; add ground nuts and a Maraschino cherry. Should be served with a few cakes. Sells for 15 or 20 cents. (O. L. Bunyan.)

X'mas Sundae Dinner

On a banana split dish at one end place a No. 12 to-the-quart dipperful of cherry ice; at the other end, place a similar quantity of vanilla or walnut ice cream. On the cherry ice, place a ladleful of cranberry sauce, sweetened; on the ice cream, put a ladleful of pudding dressing. Put half a slice of sliced pineapple on each of the ends of the dish, covering each slice with a spoonful of whipped cream. Sprinkle with crushed pecans and top with a red and green cherry. Price, 15 cents. (Charles Held.)

Nougatine Sundae

Fill one cake cup (using a No. 12 to-the-quart dipper) with walnut or vanilla ice cream (walnut ice cream is preferable). Cover the ice cream with a ladleful of nougatine dressing and top off with a cherry. Serve a small piece of nougatine candy with each sundae.

Nougatine dressing is made as follows: To one gallon of marshmallow whip add three ounces of walnut extract, one-fourth pound each of walnut and pecan meats. Mix thoroughly together. If the marshmallow whip is too thick, as is often the case, thin with a little simple syrup. (W. S. Bachman.)

Niagara

Dissolve 4 pounds of sugar in 1 gallon of water add 1½ cupfuls of straight lemon juice, color the mixture with a suitable leaf green and freeze. To serve, put one ladleful of the mixture into a champagne glass, covering the surface of the frozen mixture with finely chopped nut meats. Also dot or fleck the surface of the mixture here and there with whipped cream to represent the white caps on Niagara river. Place the glass on a fancy plate with a paper doily to fit the plate and serve with a glass of ice water. (Walter Luick.)

New Year Special

In a fancy china plate put a large No. 12 cone of chocolate ice cream. Take a cone of vanilla ice cream of similar size, invert and place it on top of the chocolate ice cream. Around the cones place four Nabisco wafers upright. Cover with whipped cream and put the numerals of the new year on top with pistachio flavor. Garnish with parsley. The design is that of an hour glass, the chocolate ice cream representing the full side and the vanilla ice cream the empty side. (B. B. Farr.)

Double Dose

On a sundae dish put one No. 12 to-the-quart disherful of vanilla ice cream and one disherful of strawberry ice cream. Over one disherful of the ice cream sprinkle powdered almonds, and over the other sprinkle powdered pistachio nuts. Top each with a little whipped cream and a maraschino cherry. Charge 15 cents.

Truth

Put a ladleful of ice cream in a 12-ounce glass; then add one ladle of cherries over the ice cream. Mix. In another glass mix 1 ounce of strawberry syrup, 1 ounce of sweet cream, 1 egg, and ¼ glass of cracked ice. Shake, strain, toss and pour over the ice cream and cherries.

Next Year's

To make, have handy a small tin of good cocoa, some granulated sugar, a teaspoon and a cup. Then in the cup mix together one teaspoonful each of cocoa and sugar, and an ounce of rich sweet cream, stirring vigorously until a smooth mixture is made. Pour this over a No. 16 scoopful of vanilla ice cream, placing over all chopped pecan nuts. Serve in a regular sundae dish. Price 15 cents. (Leonard L. Whetmore.)

Neapolitan Nut

First purchase from an ice cream dealer several bricks of Neapolitan ice cream (which is strawberry, chocolate and vanilla ice cream in layers); lay the brick on the table and cut it into five equal slices; place one of these slices on a saucer-shaped dish and on it put a No. 20 disherful of vanilla ice cream; over the latter pour a ladleful of pineapple fruit and a ladleful of chopped nut meats. Top off with whipped cream and fruit.

The author states that he has made a "special" of this sundae during the month of June and part of July, and he has good success with it. From the fact that it contains three flavors of ice cream and is sold at a reasonable price (15 or 20 cents) he says it has been a winner. (John H. Gassman.)

Japanese

The Japanese sundae is served in tall, thin sundae glasses and consists of any flavor of ice cream topped with a marshmallow-whipped cream dressing full of English walnuts. This brings ten cents and is so popular at Lord's, Portland, Me., that the fame of "Lord's Japanese" has been carried the country over by summer people who have been won by the delicious dish. ("Lord's".)

Italian

Serve in a regular sundae cup, part strawberry and part chocolate ice cream. Pour over the ice cream a chop suey mixture. Top off with whipped cream and a few fresh strawberries. Charge 15 cents.

Dardando

Figs and dates, of each (cut very fine), 2 ounces; English walnut meats, 3 ounces; heavy chocolate syrup to make 2 quarts; pour a sufficient quantity of this mixture over the ice cream in a sundae glass and top off with whipped cream and a cherry. Price, 10 cents. (Elmer E. Pierce.)

Chop Suey Mix

Take an average-sized spoonful of hard vanilla ice cream and lay it in an ordinary sundae glass, cover with "Arabian Eats," prepared as given below, and top off with a spoonful of whipped cream, in the center of which place a big red maraschino cherry. To make the "Arabian Eats," take an equal amount of dates and figs, grind and mix them together with a little maple syrup, and finally add a few chopped pecans, or whole ones may be used if preferred. "A good seller at 10 cents." (Carl Buchanan.)

Decoration

Place in a regular sundae glass equal quantities of strawberry and chocolate ice cream; over this put a ladleful of crushed walnuts and top off with whipped cream and a few fresh strawberries. Charge 15 cents when dispensed with fresh fruit. (Patrick McCole.)

Bismarck

Sundae cup two-thirds full vanilla ice cream, fill up with chopped dates and figs and pour over some maple syrup. Top off with whipped cream.

Bachelor

Take one ladleful of vanilla ice cream, put in sundae glass, and pour on the ice cream one ladleful of sauce No. 1. Take one ladleful of chocolate ice cream and pour on it sauce No. 2. Place both of the mixtures in a dish and top off with whipped cream and a stuffed raisin.

No. 1 Sauce—Take one pound of hickory nut meats and grind very fine; add one pint of sweet cream and one-half pound of sugar and boil the mixture until thick enough to serve. Put into a cool place until ready to serve.

No. 2 Sauce—Take one pound of raisins with which prepare a sauce similar to No. 1, using the raisins instead of hickory nut meats.

Stuffed Raisins—Remove the seeds from the raisins, which fill with finely chopped hickory nut meats.

Price—15 or 25 cents. Prepare sauce in small lots and keep cold. (Walter Luick.)

Hot Maple

Pour a ladleful of hot maple syrup over vanilla ice cream, and over the whole sprinkle ground hickory nuts. Serve with Nabisco wafers.

Hot Chocolate

Hot, rich chocolate syrup poured over a ladle of plain or nut ice cream. A few chopped nuts may be sprinkled over the top. Price, 10 cents.

Hot Maple

Over a ladle of vanilla ice cream pour a heavy hot cream. Sprinkle ground hickory nuts over the top and serve with Nabisco wafers. (Geo. A. Zahn.)

Hot Menthe

Over a ladle of vanilla ice cream pour a heavy hot menthe syrup and place three creme de menthe cherries on top. (Geo. A. Zahn.)

Hot Temptation

Take a banana split dish, and on one end place a cone of vanilla ice cream (16-to-the-quart); at the other end place a similar-sized cone of chocolate ice cream. Over the vanilla cream pour a ladleful of maple temptation sauce, and over the chocolate cream put a similar quantity of chocolate temptation sauce; top each cone of cream with whipped cream and a cherry, and place two water-ice wafers across the dish between the cones of ice cream. Charge 20 or 25 cents. (Harry G. Frame.)

Ice Cream Croquettes

Shape vanilla ice cream into croquette forms and then roll them in macaroon crumbs that have been powdered fine.

Ice Cream Croquettes with Cream Sauce

On a 5-inch fancy plate place a large ladleful of sweetened whipped cream; in the center of this put a cone-shaped dipperful of chocolate ice cream (10-to-the-quart) which has been coated with toasted cocoanut, and top with one green cherry. Sells for 15 cents. (L. W. Garnett.)

Moss Brae

Into a fancy ice cream dish, preferably one ornated with a foliage design, place a disherful of well congealed ice cream so ladled from the container that the cone of cream will have a hollow interior. Repeat this process, placing the second disherful athwart the first, pressing slightly on the ladle so as to join the two disherfuls of cream. Over these mounds, which are intended to represent hills, sprinkle some ground nut kernels; then apply some thick, well-made chocolate syrup, and on it place some white of egg, which has been colored with chlorophyl or some other kind of harmless green coloring, and beaten to a stiff froth. Lay a sprig of mint on the dish in juxtaposition to the finished product, and serve with a tiny spoon. Sells for 15 cents. (G. G. Rice.)

Mountain

Hard ice cream is necessary for this. Serve on a small china plate one 6-to-the-quart dipper of vanilla ice cream, then one 10-to-the-quart chocolate ice cream, pressing down firmly, then one 16-to-the-quart strawberry ice cream, pressing down hard enough to insure each of the latter to stand firmly on the lower one but not enough to spoil the mountain peak effect. On top place a spoonful of whipped cream and vanilla marshmallow and encircle the base with grated cocoanut. (E. G. Howard.)

Red Cross Special

Cover the bottom of a 12-ounce glass with sliced orange, then add, in the order named, 1 disherful of pistachio ice cream, a few sliced peaches, a disherful of New York ice cream, and a few strawberries or sliced apricots. Then fill the glass with whipped cream, placing red cherries on top to form the outlines of a cross. Charge 20 cents. (A. Frank.)

The Great Divide

On a flat plate place a No. 8 cone-shaped dipperful of vanilla ice cream. Divide the cone by splitting it deep enough from the top downward to allow a rich, ripe slice of orange to be placed in the cleft. Over the orange pour creme de menthe syrup; over one-half of the ice cream pour crushed raspberry, and over the other put a thick paste made of ground nuts and chocolate syrup. Around the base of the ice cream pour a thin ribbon of white marshmallow (made by mixing marshmallow cream with plain water and allowing the mixture to stand, using only the top). The author states that "this sundae is very simple and an be easily made. Sells for 15 cents at a good profit." (J. M. Bingamon.)

STATE CAPITOL

On a fancy china plate place a large No 12 scoopful of chocolate ice cream. On top of it put a cone of vanilla ice cream, placing the cone in an inverted position, the apex downward. Around the ice cream place four Nabisco wafers (standing upright). On top of the vanilla ice cream put a spoonful of pink marshmallow and on the latter a Maraschino cherry. Around the ice cream, between the wafers, place two squares of peach fruit and two squares of pineapple fruit; the marshmallow and cherry are supposed to represent the tower of the Capitol. (Calvin Arnold.)

REGATTA PRIDE

On a boat-shaped dish place three nabisco wafers on edge so that they meet in the center. In one compartment put a small portion of vanilla ice cream; in the next, one of strawberry, and in the third another of chocolate.

Over the whole turn a ladleful of chopped fruit—pineapple, bananas, strawberries and cherries. Top with whipped cream and garnish with a chocolate almond. Price—20 cents.

MISS NEW LONDON

One cone of peach ice cream (that's for the girl!). Pour over it one ounce pink pistachio sauce and one ladleful vanilla marshmallow (to represent her pretty cheeks). To the mixture add one ladleful of crushed walnuts, 4 slices of banana and one cherry. Serve with two Nabiscos and a 3-ounce glass of vichy water. Charge 15 cents.

To exploit this sundae make use of the phrase: "Looks good, smells good and tastes good." (C. L. Hadley.)

MAXIXE SUNDAE

On a 5-inch ice cream plate lay a very thin slice of angel food cake. On this place a No. 12 to-the-quart disherful of mixed strawberry, chocolate and vanilla ice cream. On the cream place a small portion of five kinds of crushed fruits, preferably pineapple, raspberries, strawberries, cherries and peaches, or a good fruit salad dressing and chopped walnuts will answer. Top off with whipped cream and a green cherry. Charge 15 cents. (W. C. Herget.)

"500"

In a suitable sundae dish put an 8-to-the-quart disherful of vanilla ice cream; smooth it out flat and over it pour a ladleful of pineapple aces, or pineapple cut into the shape of hearts, diamonds, clubs or spades, with maraschino flavor, may be used. In the center on top place some whipped cream.

A sign which helped to make this sundae "take" read as follows:

500 SUNDAE
As Good as the Game
15 Cents

(Carl D. Shults.)

NORTH POLE SUNDAE

On the edge of a six-inch plate lay a half slice of thin orange to represent the sun on the horizon. Now take one lady finger and split lengthwise in two pieces and place in a standing position in a six-ounce parfait glass; then fill the glass with vanilla ice cream, pressing the cream down firmly; holding the hand around the glass while filling will melt the cream enough to let it slip easily from the glass mold. This, when turned out upon the plate, forms a tall cone about the size of an empty ice cream cone. Put a pink gum drop on a toothpick and stick on one side of the cone near the top, then finish by putting a small paper United States flag on a stick on top. Charge 25 cents. (H. R. Rowe.)

NORTH POLE SUNDAE

Place a 5-cent cone of chocolate (vanilla, if preferred) ice cream in a fancy sundae glass and over it pour a small quantity of bitter sweet chocolate syrup, or ordinary chocolate syrup, if the former is not convenient; now take a large Maraschino cherry and place it on a toothpick so that the cherry rests in the center of the toothpick and the same distance from either end of the pick; place this cherry on top of the ice cream so that one end of the pick is inserted down into the cream, the other pointing upward (to represent a pole). Pour over the cone several spoonfuls of white marshmallow syrup, covering the pick, cherry and all; then trail over this covering a small teaspoonful of purple-colored marshmallow syrup, and finish by placing two English walnut halves on the side.

The author writes: "This makes a very pretty sundae, representing a field of ice and snow ('purple tinted,' as Dr. Cook says the snow at the pole is), with the pole standing in the center. I use chocolate cream and chocolate syrup because chocolate is the most popular flavor for the majority of people and that is what makes it sell so well." (W. Franklin Spayth.)

NORTH POLE SUNDAE

Split a banana and put the pieces on a long special plate to represent the runners of a sleigh. On these and to represent a "pack" put a No. 10 scoopful of vanilla ice cream, and to simulate the snow effect, cover the "pack" well with marshmallow syrup. On one end of the plate put a small candy polar bear; at the other end, put 6 small gum drops (jelly gum drops, if possible). On top of the ice cream place a small American flag. This special, the author informs us, made a very decided hit with the theater-goers in his home town, a thriving California city. Price, 20 cents. (Ray H. Chaffee.)

POLAR BEAR SUNDAE

Into a tall stem sundae glass put 1½ ounces of almond syrup, on the syrup place a No. 20 to-the-quart dipperful of vanilla ice cream, and top with a large ladleful of very stiff whipped cream. Serve. This makes a dainty white concoction.

To introduce this formula the author used a display extending from the fountain back bar over the fountain. He first built a canopy frame of 1-inch hemlock and covered it with muslin. On the frame canopy he pinned cotton, pulling it out at the ends so as to give it the appearance of a snow slide, the cotton being then dusted with four boxes of artificial snow to further heighten the snow effect. In the center of the mirror or back bar he made a large stand and covered it with cotton. On the stand he then placed a large white, pressed-paper polar bear he had borrowed from a hardware store. The shelving at the ends of the back bar were also decorated with cotton to give the "wintry" effect. The electric light globes at the top of the mirror were covered with paper shades of a red color, with the result that when the light was turned on the display showed up most attractively, and was much commented on by patrons. On the mirror was painted with white water color pigment a dotted snow storm, and over this was lettered in red "Polar Bear Sundae, 10c." (Sterling Miller.)

LOLLIE POPP

Put into a parfait glass 1 teaspoonful of crushed pineapple fruit and a cherry; then on top of the fruit put equal parts of vanilla, strawberry and chocolate ice cream so that the mixture will look like a "pousse cafe." Garnish with whipped cream and a cherry, shaping the cream into the form of a point. When correctly made the "lollie popp" looks very appetizing. Serve with a few Nabisco wafers. Sells for 15 cents. (Justin Laubere.)

DIVINITY

Into a stem sherbet glass place a No. 16-to-the-quart disherful of chocolate and vanilla ice cream, half and half; put on each side a piece of angel cake, also a piece of devil cake. Over all pour strawberry fruit and whipped cream, and top with a cherry. Sells for 15 cents, or 20 cents with two pieces of cake. (H. F. McCafferty.)

CHO-VAN-CA

Place a slice of cake in a shallow bowl or dish. On one end of the cake put a small cone of chocolate ice cream and on the other end put a small cone of vanilla ice cream. Sprinkle over this a few English walnuts and fresh strawberries. Put a dash of whipped cream and a cherry on each cone.

The name is derived from the words "chocolate," "vanilla" and "cake." Charge 15 cents. (Irwin K. Scott.)

POUSSE CAFE

Chocolate ice cream, 1 ounce; grated coconut, 1 ounce; strawberry ice cream, 1 ounce; crushed orange, 1 ounce; vanilla ice cream, 1 ounce; crushed raspberries, 1 ounce. Use a 7-ounce glace glass, add the above ingredients in alternate layers, so as to show six distinct colors. Add the chocolate ice cream first, then a layer of cocoanut, and so on, until the six layers are filled in. Serve the same as you would serve maple glace. Two ounces of any suitable flavor may be added to 4 or 5 ounces of vanilla ice cream, or ice cream of the same flavor as the syrup or fruit used.

PROGRESSIVE

Place 2 ounces of vanilla ice cream in the bottom of a 7-ounce parfait glass. Add a small ladleful of fresh crushed strawberries, pack down well, and put over them about 2 ounces more of vanilla ice cream. Then add a spoonful of sliced pineapple, two or three drops of creme de menthe syrup to give color, and fill the glass almost to the top with stiffly whipped cream. Over this sprinkle a few broken pecan nuts and top off with fresh cherries and one maraschino cherry.

The author writes that this formula will stand the test of practical dispensing and yield a good profit at 15 cents a glass. (Frank W. Hallock.)

RAINBOW

Take an 8-ounce short-stem cocktail glass and pack it with vanilla ice cream up to within a quarter inch of the top. Now take a pointed soda spoon and from down the inside of the glass take out a spoonful of ice cream on three different sides. In the cavities thus made pour claret syrup in one, pineapple syrup in the second and mint syrup in the third. Then over all put a small ladleful of crushed cherry fruit and top off with a Maraschino cherry. Serve on a flat dish with spoon and two wafers. Charge 20 cents. (Harrison W. Wendell.)

BATTLESHIP SUNDAE

In the center and lengthwise of a banana split dish place a long scoopful of ice cream, giving to the ends of the ice cream a battleship appearance by means of nabisco wafers, by placing two of the wafers at either end on their sides in the form of the letter V turned on its side, the sharp point being turned forward to represent the prow of the boat; the rear of the ship is reproduced in the same way, except that the wafers forming the V are turned in the other direction. For masts, two Veronique wafers are stuck upright in the ice cream. Now put a whole cherry on each end and in the center, first running a toothpick through each cherry to represent cannon, and stick a small flag in the stern of the ship (small flags of each of the countries at war, as well as that of the U. S. are easily obtained). Along the sides of the "battleship" pour some good brand of puree to represent the ocean. Sells for 25 cents.

The author states that to advertise this specialty he has reproduced six "battleships" in his window, making them of cotton, each ship of which carries a small streamer indicating the country it is supposed to represent. On the stern of each boat is placed the flag of the country named on the streamer. In the back of the window appears a large map of Europe. The window display proved a big drawing card and helped him to sell many "battleship sundaes." (F. J. Arnoldy.)

EGG UP

Serve on a small sandwich platter. Place two leaves of fresh lettuce on the platter. Take two small disherfuls of vanilla ice cream and lay them side by side. Turn the disher over and smash a hole in the center of each portion of cream to represent a hollow; in each "hollow" put one-half an apricot to simulate "fried eggs up." To add to the flavor and realistic appearance of the dish (*i. e.*, pepper and salt effect), sprinkle with a little cinnamon and powdered sugar. (Jos. B. Clark.)

MUTT AND JEFF

On a long platter put an "animal" cracker representing a horse; on the cracker put a No. 10 dipperful of vanilla ice cream and a No. 20 dipperful of strawberry ice cream. The two portions of ice cream represent "Mutt and Jeff" and the cracker is used because the two characters represented like to bet on the "ponies." Over these pour a caramel sauce made of equal parts of glucost, sugar and cream, as follows:

Heat the glucose and sugar almost to the boiling point and add the cream, stirring until thoroughly mixed.

Then place a spoonful of whipped cream on each of the figures, a green cherry on "Jeff" and a red one on "Mutt." Sells for 20 cents. (Will McDonald.)

FLAG DAY SPECIAL

Place three small nabisco wafers flatwise across a boat-shaped dish so as to form a bridge; on the wafers place one No. 10-to-the-quart dipperful of fresh strawberry ice cream, and around the base put about 10 strawberries with a ladleful of whipped cream. Then put two nabisco wafers on two sides of the cone of cream so as to meet at the top. Crown with a large strawberry surmounted by an American flag, the staff of the latter being held in place by pushing it into the strawberry. Suitable flags can be bought for five cents per dozen. Price, 20 cents. (John Lentz.)

NATIONAL

Take two small dishes of marshmallow cream and color (with cake coloring), one red and the other blue. Then in a fancy sundae dish put a No. 10 ladleful of vanilla ice cream; on one side of the cream put a spoonful of red marshmallow cream, and on the other side a spoonful of blue marshmallow cream, allowing the ice cream to show in the center of the dish so as to represent the national colors. Sprinkle a spoonful of ground nut meats on top of the dish and serve.

To advertise this sundae the author uses a window strip like the following:

Be Patriotic!
Try National Sundae, 10c.

(R. E. Paul.)

LIVERPOOL

Put a small dipper of water ice in a stemmed glass; top with whipped cream from a fancy piping bag. Decorate with red and green cherries, and small pieces of angelica arranged in the form of green leaves. (Jas. M. Johnson.)

U. S. A.

Make strawberry, lemon and grape sherbet, as follows: Strawberry water, 3 quarts; sugar, 6 pounds; solution of citric acid, 1 ounce; white of one egg. In the same manner make lemon sherbet, using the juice of two lemons, and grape sherbet, using four quarts of ripe grapes. Press the berries through a fine sieve, add sugar, water, white of egg, and solution of citric acid. Place each sherbet mixture into separate freezers and freeze. To serve, take a ladleful of each of the sherbets and place them in a suitable glass in the order of their colors, emblematic of the flag—red, white and blue. After this has been done top off with whipped cream; now in the whipped cream make three grooves, filling one groove with lemon syrup, the second with strawberry syrup and the third, with grape syrup. Place in the center of the dish a small United States flag. Serve with a glass of water and paper napkin bearing the U. S. colors, red, white and blue. Price high enough to cover costs. The U. S. A. is a great holiday feature. (Walter Luick.)

EASTER

First have a mould made in the shape of a cross. This is not so difficult as any tinsmith can make one at a slight cost. This mould works on the same principle as that employed for the "club sundae" and with which nearly all dispensers are familiar; or one can take for his model the form used for the ice cream, push the moulded form out on a six-inch plain white hollow cross instead of a square or oblong shape. Having provided the mould, make a few wax paper linings by placing the mould upside down on a piece of wax paper and tear out the paper in the shape of the cross. These paper linings keep the cream from sticking to the mould when the ice cream form comes out of the mould. Now place a wax paper in the bottom of the mould and fill it with plain vanilla ice cream, push the mould form out on a six-inch plain white plate and you have a perfect cross of white. Whip up some cream that has had added to it a little purple color and place it in a pastry tube or paper cornucopia. With the tube squeeze out the colored cream on the cross of ice cream in the form of letters to spell the word "Eastertide." This sundae is very simple to make and can be turned out as fast as any common sundae. The mould should be made to hold about as much as the regular No. 12 disher. Price, 15 or 20 cents.

The author submitted with his formula a diagram of a sundae in the form of a cross, the first two syllables of the word "Eastertide" appearing on the upright section and the last syllable, reading from left to right, on the arms of the cross. (H. R. Rowe.)

ST. PATRICK'S DAY SPECIAL

On a 4-inch sundae plate place a No. 8 scoopful of vanilla ice cream and on it put a slice of creme de menthe pineapple. Place pecan halves around the cream and scatter a few chopped walnuts over the top. Then add whipped cream and a creme de menthe cherry with a toothpick through it.

ST. VALENTINE'S OWN

To dispense this sundae have a tinner make a heart-shaped mould, about 2½ inches in diameter and 1¼ inches in depth. This mould works similarly to the club house mold with which nearly all dispensers are familiar. In the mould place a layer of vanilla ice cream, a layer of strawberry ice cream and another layer of vanilla ice cream. Trim the moulded ice cream even with the top of the mould, then place the cream on a china plate of fancy design, measuring about 6 inches in diameter. Pour over the cream a ladleful of crushed strawberries, add a spoonful of mixed ground nuts and top off with a spoonful of whipped cream, a cherry, and a sprinkle of ground cinnamon.

The author states that this sundae is a good seller at 20 cents. He has advertised it in the daily papers of his town with much success. (Philip W. Fraker.)

(9) Fountain Desserts

In catering for the public taste for novelties in the sundae line dispensers have gradually elaborated the original idea of ice cream plus a syrup, till many of these concoctions have become so complicated that it is no longer possible to recognize them as the children of the simple sundae and college ice.

The first of these fancy fountain desserts to win favor—and it still maintains its popularity—was the banana split. This too has been elaborated and in the following pages will be found many very fancy and special splits. The use of other fruits, notably cantaloups, pineapples and oranges, was early introduced.

A more recently introduced feature of the development of the dessert is in the use of cakes. All the various staple cakes are now used as the basis upon which the delicacy is built. Angel cake is very popular, and serves admirably for this purpose. From the bakers, eclair and puff shells can be bought, and these when filled with ice creams and dressed with toppings, make easily prepared, yet very elaborate looking and tasty specialties.

Good service is essential in serving these "extra specials." The more elaborate the dessert, the greater care should be exercised to see that the result is not merely a "mess." Some dispensers show a tendency to put "everything but the kitchen stove" into their desserts. This is a mistake. Too many flavors mean the destruction of all good flavor. It is a safe rule to be sure that you have a good predominating flavor, and then to take care that the accessories blend with it. Strawberry and raspberry, both capital flavors, kill each other. This often happens, especially among the fruit flavors. Strawberry and currant, however, make a fine combination. If a dispenser will do a little experimenting himself, he will soon discover the best combinations to employ.

Like the sundaes, all desserts should have a glass of iced water served with them. It is not necessary, however, to serve a cracker or cake with those that have a cake basis. The fruit mixtures are often served with a sweet cooky or biscuit.

BANANA SPLITS

Banana Split with Cherry

Slice a banana in two. Place a spoonful vanilla ice cream in the center, and top off with maraschino cherries, and pour cherry syrup over it. Price, 15 cents.

Banana Nut Split

In a suitable dish place a banana which has been split in two lengthwise. At each end put a small cone of ice cream, a portion of whipped cream being used to fill the center. On the whipped cream place a Maraschino cherry and around it a few slices of citron. Cover one of the cones of ice cream with chopped mixed nuts and the other with chopped mixed fruits. Price, 20 cents.

Culebra Cut

Use a boat-shaped dish. Peel and cut lengthwise one banana, place on the dish, spreading the slices of banana apart. Cut a small slice of pineapple in the center, place one cut on outside of banana in the center (to represent Culebra cut through which the boat is passing). Now pour pistachio-flavored syrup colored a pale green (representing the ocean) on the outside of the banana and on each side of the pineapple so as to trickle under the fruit. On top of this shake a tablespoonful of ground pistachio nuts and put a tablespoonful of malted milk on each side of the banana (the rock and sands of the cut). Near each end of the banana place a No. 20 to-the-quart cone of fruit ice cream. In the top of one place a tiny U. S. flag, and in the other stick a Union Jack. In the center put a ball of chocolate ice cream into the sides of which stick two chocolate cigarettes (the guns), and between the cones sprinkle a teaspoonful of chocolate tidbits (the people on board). A toothpick placed upright in each end of the banana, one carrying a red cherry, the other a green cherry, will reproduce the signal lights. Serve with a tiny glass of vichy water. The author states that this delicacy "costs 12c to make and easily sells for 20c. Can be made in a couple of minutes and is pleasing to the eye and taste. All the people talk about it." (C. L. Hadley.)

Elfin Delight

Cut a banana into four thin slices, which place to form a square with the ends overlapping. Fill the space within the square with a sundae portion of vanilla ice cream. Now pour a syrup composed of 10 ounces each of crushed strawberries and cherries (Morello), and 6 ounces of grape juice. In the right angles formed by the overlapping ends of the banana slices place a point of whipped cream. Garnish with creme de menthe or maraschino cherry and a few whole pecan meats. With a little practice this specialty may be quickly and neatly prepared. Price, 15 or 20 cents.

Aviation Glide

Place in an oblong suey dish one split banana, flat side up. Use three scoopfuls (No. 16 disher) of chocolate, vanilla and strawberry ice cream. On either side of the chocolate ice cream place a nabisco wafer for forward ends of the air ship, and in the strawberry ice cream stick a nabisco wafer to represent the tail piece of the machine. On the chocolate ice cream place a red cherry to represent a man riding in the air ship. Between the scoopfuls of ice cream sprinkle crushed cherries and pineapple, and top with chopped pecans and whipped cream. "Has sold well to students of the University at 20c," writes the author of the formula. (M. C. Thurber.)

Banana Bon Ton

Slice a banana lengthwise and lay the pieces on a suitable dish; add 2 No. 10 ladlefuls of ice cream or 1 ladleful of ice cream and 1 ladleful of lemon, orange, or pineapple sherbet. Cover the ice cream with fresh strawberries, and the sherbet or other portion of ice cream with vanilla marshmallow. Top off with a red and green cherry. Price 20 cents.

Maid o' my Dreams

Slice one-half of a banana crosswise and place the slices on a small butter plate. Over the slices place a ladleful of good stiff ice cream and over the cream sprinkle finely ground nuts and top off with Maraschino cherry. Over all place a ladleful of whipped cream that has been sweetened. Price, 20 cents. (Mrs. E. L. Feagan.)

Hindoo

Split a banana and lay the pieces on a small plate; on one end of the banana put one dish of nut cream, and on the other put vanilla or strawberry cream, placing midway on the banana and between the ends a whole fig. On top of the nut cream put a creme de menthe cherry and on top of the vanilla or strawberry cream a Bigarreaux cherry. Whichever cream is used, pour crushed strawberries over it and then sprinkle chopped nuts over all. Price, 20 cents. (Mark C. Wilhoite.)

Lavender Lady

On a banana split dish place a sound, ripe banana which has been sliced lengthwise. Place on one end a disherful of vanilla and strawberry ice cream, and on the other a disherful of vanilla and chocolate ice cream. Over the whole pour sufficient lavender dressing, prepared as follows: Marshmallow paste, 1 pint; raspberry syrup, 4 ounces; grape juice, 1 dash; shredded cocoanut, 2 ounces, and sufficient simple syrup to bring the dressing to the proper consistency. Color the mixture the desired shade by means of red and blue coloring, both of which may be had in certified food colors. Red cherries may be used to top with, but the lavender marshmallow will carry out the color scheme to better advantage.

The author writes as follows concerning his formula: "The name came to me by reason of the fact that one of our patrons, a very popular Southern girl, 'blossomed out' in a very becoming attire of lavender. Her frequent appearance at the fountain in this garb helped to draw attention to the sign I had in mind. To advertise the specialty, I took a 22 x 28 gray card, on the right side of which I pasted a picture of a 'lavender lady' cut out of lavender colored paper. The headline to the wording was 'COMING,' and in smaller letters, 'to be a great favorite. She's brand new, sweet and attractive. You'll miss a treat if you do not meet her.'" Price, 20 cents. (B. C. Archibald.)

Peter Pan

Place in an oval dish one banana sliced lengthwise and at the sides place four frou frou wafers. After this has been done place one ladleful of vanilla ice cream on each end of the bananas; in the center of each put an ice cream cone filled with chocolate ice cream and around this pour vanilla syrup. Top off with whipped cream, placing over the cream sliced bananas. Place the dish on an extra plate, and serve with frou frou wafers and a glass of water on the side. (Walter Luick.)

Three Twins

Into a suitable dish place a No. 10-to-the-quart dipperful of rich vanilla ice at one end of the dish place a No. 16 cone of vanilla ice cream; at the other end place a cone of maple ice cream with a cone of chocolate cream in the center of the dish. Between the cones place a tablespoonful of whipped cream and top each cone with a red Maraschino cherry. Place a nabisco wafer on each end of the dish and serve.

The author states: "To advertise 'Three Twins' we hung up a sketch of three small boys with large straw hats and ragged trousers and it sold readily at 20 cents. It is a good scheme to give the customer three kinds of ice cream and there is a nice profit in the sale of this sundae at the price named." (Mrs. E. J. Beattie.)

Goody Goody

Into a suitable dish place a No. 10-to-the quart dipperful of rich vanilla ice cream; over this pour an ounce of maple syrup and sprinkle on 1 tablespoonful of fresh broken walnuts; cut a banana in half and use one of the halves sliced in about 4 pieces, standing the pieces one on each side of the dish. Also place a Maraschino cherry on each side and a tablespoonful of good whipped cream on top. Sprinkle over all powdered red sugar. Use a dainty dish, spoon, and napkin, and serve with a glassful of water. Price, 15 or 20 cents. (Edwin Horace Shortiss.)

Foot Ball Dessert

Take a banana, freed from its skin, place it in an oblong dish and cut lengthwise; then place two 16-to-the-quart ladlefuls of chocolate ice cream in the center, the cream being in the form of half globes; smooth off the cream and press the half globes together to represent a foot ball; then cut the ice cream lengthwise in the center, with a few cuts crosswise, and on this put a few walnut meats, some chocolate syrup and a ladleful of whipped cream; place a nabisco on each side and top off with red cherries. According to the author, this specialty can be served for 15 or 20 cents. For advertising purposes he uses a window sign made of heavy paper with the lettering done in brown ink to represent the color of a football. A sample advertisement submitted carries the following lines:

Special
FOOT BALL DESSERT
at the Fountain
Get in the game for 15 cents

(Gus Scholl.)

Fan's Special

In an ordinary frappe dish slice half a banana, over it put a few fresh strawberries, and cover with a layer of whipped cream. On the cream place a dipperful of ice cream made in the form of a sphere to represent a ball. Serve with the dish a nabisco wafer, standing it on end and alongside of the cream. When fresh berries are out of season, use crushed strawberries. Sells for 15 cents.

Fair Harbor

Use a dome of ice cream for the foundation, half a banana cut crosswise for the tower, three toothpicks for the light supports, four cherries, one green, two red and one white, for the signal lights, a ladleful of pistachio flavored syrup, colored a light green, for the ocean, five pieces of banana cut in odd shapes for the shells that cling to the base, and a teaspoonful of broken nuts to represent rocks. To dispense, use a footed sundae dish. Place in it the vanilla ice cream, then take half of a banana (cut across the peel) into the lower or cut end of which, in the center, push a toothpick, and through the upper end or top of the banana insert two toothpicks so that they will cross each other and emerge from the sides. On the ends of the toothpicks place the four cherries for the signals, one cherry for each light. The "tower" is now placed on the dome of cream and is held in position by the toothpick extending from the bottom of banana down into the cream. Pour pistachio syrup over all, add the odd pieces of bananas and broken nuts, and serve with crisp saltines. Sells for 20 cents. (C. L. Hadley.)

Comet

Peel one banana, slice in two lengthwise and lay the slices parallel on a plate; place a ball of vanilla ice cream on one end of the slices; place over the banana crushed fresh strawberries and over all pour a thick marshmallow cream, then put a Maraschino cherry on a toothpick on the ice cream. The ball of ice cream represents the head of the comet, while the two slices of banana represent the tail. This dish should bring 15 cents. (C. Ray Wait.)

Base Ball Frappe

In an ordinary frappe dish slice half a banana, over it put a few fresh strawberries and cover with a layer of whipped cream. On the cream place a dipperful of ice cream made in the form of a sphere to represent a ball. Serve with the dish a nabisco wafer, standing it on end and alongside of the ice cream. When fresh berries are out of season, use crushed strawberries. Sells for 10 or 15 cents. (Sterling Miller.)

Banana, Nut and Fruit

Slice a good ripe banana in halves and place the pieces flat side down on an oblong hand-painted china plate; between the slices put a 20-to-the-quart mold each of vanilla ice cream and chocolate ice cream; over one of these pour some chopped pecans and over the other, some pineapple fruit. Place a cherry on each side of the molds of ice cream and top off with whipped cream. On top of the cream put a few fresh pecan meats. Price, 20 cents. (Willie Burch.)

Bahama Banana

Split a banana lengthwise and place the pieces on an oval plate. Over the pieces put a No. 12 dipperful of vanilla ice cream, cover with mayonnaise dressing and top off with a spoonful of ground nuts.

The author states that this dressing can be bought as prepared in the market, or it can be made as follows: Take 3 eggs, 1 tablespoonful each of butter and sugar; 2/3 cupful of vinegar, 2/3 cupful of milk or cream, a dash of salt, some mustard and a little pepper. Mix the dry ingredients together and stir them into the beaten eggs, then add the vinegar, boil for a couple of minutes and when cool add the milk. The sundae sells for 15 cents. (Miss Beulah Lucas.)

Delmonico Special

Use a long dish and put a small ladle of ice cream at each end. Then cut half of a banana into four thin slices lengthwise. Put two of the pieces on the dish in an outward V-shape between the two molds of ice cream, and then place a slice of sweet orange around the entire dish in each of the vacant places, or four all told. Pour over this an ounce of cherry wine syrup and a sprinkle of nuts; top off each mold with whipped cream and a cherry. Price, 20 cents.

Baby Grand

Take a half of a banana, slice it in two, and lay the pieces in the center of a banana split dish. In the center place some ice cream. Cut the other half of the banana in round pieces and lay around the ice cream. Top the ice cream with whipped cream and a cherry, and put ambrosia dressing at each end of the dish. Serve with a cereal tea wafer or a wafer of any other kind. Sells for 15 cents. (Harry Slavitchek.)

Brass Band

Into a saucer place a 5-cent dipperful of fruit ice cream, inserting into the cream a toothpick carrying a cherry. Along one side of the cream lay one-half of a frozen banana, decorating it with salted peanuts laid in a row. The fruit cream represents a drum, the cherry on the toothpick the drum stick, the banana any horn instrument, and the peanuts, the keys of the instrument.

The frozen bananas are prepared as follows: Take nice, solid bananas, perfectly but not too ripe, skin and cut in two crosswise; run a soda straw into each banana half from end to end; bend the protruding end of the straw and reinsert it into the banana so as to form a hook or handle; take the banana halves by the straws and set them into a well-packed ice-cream freezer, using a sufficient number of the pieces of banana to cover the bottom of the freezer. Over the bananas pour some half-frozen sherbet, or orange ice will do. Let stand until well frozen. If the batch should freeze so hard as not to permit the bananas to be lifted from the packer by the straws, remove the packer from the tub and allow the mixture to soften, or loosen the banana halves from the bottom of the packer by means of two soda spoons. The cherries should be stuck on the toothpicks and placed into a cup or bowl in readiness to serve.

The author states that he sold this sundae for 10 cents, making thereby a profit of 6½ cents, the occasion being that of a Chautauqua celebration. (John Griffith.)

Directoire

A modification of the banana split. Slice a banana lengthwise and spread open on a dish, the lower ends of the pieces being held together by the peel. Now fill the center with ice cream, over which pour vanilla syrup. Top off with whipped cream and a maraschino cherry. Price, 15 cents.

That Mysterious

Make a paste or thick syrup by boiling together a pint each of white cane syrup and lukewarm water with four pints of granulated sugar for four minutes. Beat the whites of four eggs to a stiff froth and to the mixture gradually add the syrup, stirring rapidly until free from lumps. To prepare the sundae, place a split banana upon an oblong dish and on it put a No. 10-to-the-quart dipperful of vanilla ice cream. Over all pour a ladleful of the syrup first described; on top of the ice cream put a few drops of chocolate syrup which will serve to "stripe" the sundae. (J. M. Bingaman.)

Chocolate a la Honduras

Serve in a rather shallow and broad dish. Peel a fine ripe banana, slice it in two and between these sections pile up a liberal allowance of chocolat ice cream. Then over the ice cream pour some whipped cream, adding two or three strawberries and a little grated chocclate to give the proper color and taste.

Uncle Sam

Put a whole banana on a platter; then take 2 ounces of white ice cream and ½ ounce of lemon syrup and make an emulsion, which pour around the banana. Put one cone-shaped scoop of white ice cream at the end of the banana, and top with a small U. S flag. Sells for 10 or 15 cents. (Sydney Trau.)

Royal Banana Surprise

Take one dozen large, ripe bananas and split the skins carefully lengthwise on one side only, and remove from the fruit. Next cut up six of the bananas in a mixing bowl, add one cupful of ground pecan nut meats, one-half cupful of shredded cocoanut, one pint of maple nut ice cream, and mix all well together; then take a spoon and refill the banana skins with the mixture, moulding it so that the cut edges of the skins will meet when filled; then place the sundaes thus made in a brick ice cream cabinet to freeze and keep hard. To serve, place one of the stuffed banana skins on a plate, put a ladleful of whipped cream on the side, sprinkling over it lightly a little ground cinnamon; serve with a spoon, glass of water and a napkin. Sells for 25 cents. The author states that "the beauty of this sundae is that it has the customer guessing until he opens the banana skin and finds it loaded with a delicious dessert." (Harry G. Frame.)

Banana Neapolitan

Peel and split a banana and place the pieces on an oblong glass or china dish. On the sliced banana place a No. 20 disherful each of chocolate, vanilla and strawberry ice cream. Over these sprinkle a few chopped nut meats and a little rich fresh strawberry dressing made by mashing the berries in granulated sugar. Top each cone of ice cream with a dash of whipped cream, and a large strawberry or cherry. A good seller at 20 cents.

Banana Martinique

Peel and split a banana and lay the halves on a small oblong dish. On this put a No. 16-to-the-quart disherful of strawberry ice cream, and a similar quantity of coffee or vanilla ice cream. Over each cone of ice cream put a little whipped cream, sprinkle with macaroon crumbs and top with a cherry. Price, 20 cents.

FANCY FRUIT DESSERTS

Cantaloupe Split

Take a cantaloupe, remove the rind and then slice lengthwise into ten parts; place two of the slices lengthwise in an oblong dish and a ladleful (eight-to-the-quart and cone-shaped) of vanilla ice cream in the center. Then pour on a ladleful of fresh pineapple fruit, adding a spoonful of walnut meats and whipped cream; place nabisco wafers, one on either side of the ice cream, and top off with a red cherry. Can be served for 10 or 15 cents.

The author used a window sign made of heavy paper to advertise this sundae, the lettering being done with red ink, as follows:

Special!
CANTALOUPE SPLIT
at the Fountain.
It's Real. 15 Cents.

(Gus V. Schall.)

Melon a la Mode

Small, ripe cantaloupe (or musk melon), cut lengthwise. Scoop out seeds and fill with ice cream (vanilla generally used); sprinkle with powdered sugar to taste. Price, 15 cents.

Melon Maid

In a round dish of about 4 inches in diameter, place half of one cantaloupe (small muskmelon) and in the center of the melon place a ball of ice cream. On one side of the ice cream put crushed peaches and on the other crushed strawberries. Top off with whipped cream and a cherry. Price, 15 cents. (Donald Strauss.)

Cantaloupe a la Cleveland

Select a ripe cantaloupe and cut in half; then cut a thin slice off of the end so as to make the half of the cantaloupe rest evenly on a china platter. Take out the seeds and add a small scoopful of vanilla ice cream (about 16 to the quart), unless other flavor is specified. Then take a spoon and make a concave opening on the top of the ice cream and fill it with fresh strawberries and grated English walnuts. Top off with a whole red cherry. "A splendid seller when cantaloupes are in season." Price, 20 cents. (Sydney Trau.)

That Heavenly Dream

Take a ripe Osage cantaloupe (these cantaloupes are ripe to the rind and make good sundaes), cut it in two, take the seeds out, and slice off the bottom so that each half will stand upright on an oblong dish. The cantaloupe should stand on the ice at least six hours before it is wanted for use. Now place in the melon some pineapple fruit and on it put a disherful of rich maple cream. For a dressing, take four oranges which are not dry or spongy, four ripe bananas, and one pound of fresh ripe cherries; chop all up together and cover with powdered sugar; let stand for 12 hours. Use enough of the dressing, and top off with whipped cream and three cherries, placing the cherries lengthwise and about an inch apart. Should bring 25 cents. (Willie Burch.)

Frozen Cantaloupes

Select small, sweet, and very ripe cantaloupes. Press all the ripe portion after rejecting the seeds through a sieve. To each two quarts of pulp and juice add one pint of orange juice, one pint of grape juice, and one-half pint of lemon juice. Sweeten this with three pounds of sugar. Let stand until a thick syrup has formed. Color with a little green and amber coloring. When the mixture has begun to stiffen fold in the stiffly beaten whites of two eggs and one pint of whipped sweetened cream. Pack and let stand four hours. Price, 15 cents.

Maple Melon Mix

Cut an ordinary sized round nutmeg muskmelon or cantaloupe into halves; remove the seeds; cut off a small slice on the bottom of one of the halves so that it will set level, then place it on a china saucer. Fill the center of the half of the melon with one 10-to-the-quart scoopful of vanilla ice cream; over the cream pour a ladleful of "maple mix," top with whipped cream and a couple of red cherries. "Maple mix" is prepared as follows: Put one quart of milk in a double boiler and bring it to the boiling point; add 14 ounces of maple syrup, two well-beaten eggs and stir well. Now burn one cupful of brown sugar, until it becomes the color of maple sugar, add it to the mixture, and stir until dissolved. Then dissolve 2½ teaspoonfuls of corn starch in a little cold water, add this to the mixture and boil until just thick enough to pour; remove from the fire, and add ½ pound ground walnuts, stirring in well and cooling before using. Can be sold at a good profit for 20 cents. (Harry G. Frame.)

Cantaloupe Imperial

Take a cantaloupe, cut in half, take out the seed and put a scoopful of vanilla ice cream in the cavity; pour over the ice cream vanilla syrup and over this put a scoopful of peach ice cream, topping off with finely chopped nuts and whipped cream. On the whipped cream place a piece of cantaloupe. Put the sundae on a fancy dish and serve with Nabisco wafers. Sells for 25c.

A Pear of Peaches

Procure a number of rather large nice ripe cantaloupes. Cut one of them in two, lengthwise. Then cut one of the halves into strips of about two and a half or three inches in diameter across the middle. Cut a slice off the bottom so that the pieces will lie flat. Place two of the pieces side by side on a fancy china plate, putting on each piece a small ball of peach ice cream (about half the side of a No. 16 mold). Over these pour a ladleful of fresh crushed pears, and between them put two red Maraschino cherries. Price 15 or 20 cents.

The author says that by having a number of cantaloupes cut up one can prepare this sundae in a very short time. (Victor Johnson.)

Cantaloupe Surprise

On a six-inch plate place one No. 16 disherful of vanilla ice cream. Over this invert half a small ripe cantaloupe, which has been peeled, taking care to hide all of the ice cream. Now arrange four slices of banana at regular intervals around the cantaloupe, and top with whipped cream and a cherry. The author states that this is a sure winner at 20 cents, but that the price may be varied according to the cost of cantaloupes.

Cantaloupe with a Peach

Take half a cantaloupe, clean out the seeds and cut a small slice from the bottom so that the cut cantaloupe will stand on a small plate. In the cantaloupe place a ladleful of fresh sliced peaches, add a 16-to-the-quart scoopful of fresh peach ice cream, pour over a ladleful of whipped cream and top with a creme de menthe cherry; on the dish beside the cantaloupe lay two nabisco wafers and serve. Sells for 15 cents. (Sterling Miller.)

Rocky Ford Special

On a small breakfast plate place half of a medium size Rocky Ford cantaloupe. Into this put a small ladleful of caramel nut, tutti-frutti or strawberry ice cream. Over the cream pour a ladleful of pineapple fruit and top with whipped cream and a cherry. Price, 20 cents.

Watermelon Royal

Take a long glass dish and on it lay a neat slice of the heart of a ripe watermelon, avoiding the seeds. On one end of the dish put a small ladleful of pineapple water ice; at the other end place a similar quantity of orange water ice; pour over all a little strawberry syrup and put a maraschino cherry on the water ice at each end of the dish. Serve. Price, 20 cents.

Watermelon a la Atlanta

Take a watermelon and cut it into one and a half inch cubes. Place one of the cubes in an oblong dish; on one side of the cube of melon put a ladleful of vanilla ice cream, and on the other side a ladleful of strawberry ice cream (16-to-the-quart). Then pour a ladleful of strawberry fruit over the vanilla ice cream, and a ladleful of pineapple fruit over the strawberry ice cream. Put a ladleful of walnut meats and some whipped cream over the melon, and top off with red and green cherries, placing a nabisco wafer on each side of the melon. Sells for 15 cents and up.

The author states that a window sign can be made of heavy paper, the lettering being done in red and green ink to represent the colors of a watermelon. (Gus V. Schall.)

Peach Melba

Use half a large preserved peach, free from stone. Place in a suitable glass or china dish of the saucer type. This dish should be about 4 inches in diameter and 1½ inches from base to rim. Over the peach place a suitable quantity of ice cream, either free from flavor or vanilla flavor, and over the ice cream and peach pour from 2 to 3 ounces of rich and strong strawberry syrup. This syrup should be at least twice the strength of ordinary syrup utilized in the regular manner. A number of strawberries in their whole form can be added, especially when the fruit is in season. Price, 20 cents.

Peach Melba

Ice cream for the foundation, covered with imported fresh peaches sliced, covered with a syrup sauce of raspberry kirsch and maraschino. This is a variation of the original "peach Melba" in which the peach is served whole and covered with a raspberry puree. Price, 15 cents.

Baby Mine

Place one spoonful of vanilla ice cream in a sundae dish; cover the ice cream with half a peach, and base it with whipped cream, then sprinkle a few nuts around the base. Charge 15 cents.

This above formula has been tried by the author's brother, who runs a store in an Indiana town, and the demand has been excellent. He says he sells on an average 25 cans of peaches each day in the Summer to supply the trade in this sundae. (Theo. Louvis.)

Peaches Supreme

On a 5-inch fancy plate place a dipperful (16-to-the-quart) of vanilla ice cream; on either side of the ice-cream place the half of a peach (the peach having been previously pared, cut in two and the halves sprinkled with powdered sugar); over the whole pour one ladleful of sliced fresh peaches, and sprinkle with one spoonful of walnut meats broken into small pieces; top with whipped cream and one red cherry. The author of this formula writes that he has been selling this dish for 15 or 20 cents and it has been a winner. (P. A. Ritto.)

Peach Creme

Wipe and remove the skin from one peach. Force the pulp through a sieve, and if there is much juice, drain. Beat the white of one egg, using a silver fork. Gradually incorporate the peach pulp while continuing the beating. Sweeten with powdered sugar, pile on a glass dish, and serve with steamed custard or cream.

Peach a la Reine

Place on a china plate one 6-to-the-quart dipper of vanilla ice cream, cover with vanilla marshmallow cream, encircle the base with quartered peaches, sprinkle cocoanut over all, and top with a Maraschino cherry. Charge 15 or 20 cents. (E. J. Howard.)

Pineapple Supreme

Pare and grate one pineapple, add as much sugar as you have pulp; place in a saucepan on a medium hot fire and boil like a jam. Let cool, then beat the whites of five or six eggs to a very stiff froth; beat in the pineapple and pile on a glass dish. Serve with custard or with pineapple syrup. Price, 15 cents.

Snowball

Into an ordinary mixing glass put 1 disherful each of pineapple ice and vanilla ice cream, and 1 fruit ladleful each of grated pineapple and whipped cream. With a mixing spoon frappe the whole well together. Put the frapped mixture into a 10-ounce fancy stem glass and top off with a little whipped cream and a Maraschino cherry. Serve with a teaspoon and nabisco wafers on a flat dish; also serve the customer with a glassful of water. It sells for 20 cents. (H. Wendell.)

Pineapple a la Honolulu

In a long stem champagne cup glass place a No. 10 disherful of vanilla ice cream. Take a round slice of Hawaiian pineapple and cut from the center, making eight triangular pieces. Place these points upward around the ice cream. Over the cream sprinkle some chopped walnut meats and pour on a little grape syrup. Top with a tablespoonful of whipped cream and one red cherry. Serve on a 4-inch china plate on which are two nabisco wafers. Sells for 15 cents. (Sam Davis.)

Arctic Oranges

Cut oranges in half and scoop out the pulp. Separate pulp from seeds and tough portions and to each quart of pulp take one tablespoonful of granulated gelatin and dissolve it in a little cold water, then add one pint of hot water. Combine gelatin mixture with orange pulp, fold in half a pint of whipped cream and sweeten to taste. Fill orange shells and set aside to harden. When mixture is stiff in shells heap with whipped cream and serve very cold. Twenty cents is suggested as a price for this feature.

Orange Melba

Take one orange, cut away the rind so as not to remove any of the fleshy part of the fruit. Peel down the skin until the bottom of the orange is nearly reached. Then, with the skin still attached to the lower end of the orange, run your finger down into the center of the orange, spreading the sections and being careful not to break the orange or allow the juice to run out. Carefully separate the divisions or parts of the orange and while still holding the fruit in the hand, make a cup-shaped cavity in the orange and into it put a dipperful of ice cream; pour over the ice cream half an ounce of nectar syrup, add a spoonful of flaked cocoanut and top off with a red Maraschino cherry. Sells for 15 cents. (Alfred Miller.)

Harvest Moon

In a banana special dish place a good clean corn husk; on one end of the husk put a good-sized ball of orange ice cream. It is quite necessary that the cream have a good orange or golden color so as not to defeat the object of the name. The author uses a specially prepared cream, although a cream made by any good formula will answer. On the other end of the corn husk place a copious supply of toasted corn flakes. All around and partially covering the flakes place well-sweetened whipped cream.

According to the author, this makes an edible and very nourishing dish. The name and dish are harmonious, as the orange cream is intended to represent the harvest moon, while the husk makes a good foundation and together with the flakes represents the corn harvest. The whipped cream is to represent the early frosts which arrive about the time of husking. He states that the dish may be sold profitably in most localities for 15 cents. It is a question whether this price would provide an adequate profit. (B. C. Archibald.)

School Maid's Delight

On a 4-inch fancy plate place a thin slice of orange and over the orange put a No. 16 dipperful of vanilla ice cream; over the ice cream pour one ladleful of freshly crushed orange and one spoonful of chopped nuts; top with marshmallow whip and one Maraschino cherry; serve with two Coronado wafers. Price 10 cents; more fruit, 15 cents.

Catch of the Season

Boil 4 pounds of sugar with 4 cupfuls of water, then add 8 cupfuls of orange juice; scald 4 cupfuls of light cream, add the yolks of 8 eggs and cook over hot water until the mixture thickens; when cool add to the mixture 4 cupfuls of heavy cream beaten stiff, mix well and put into the freezer and partly freeze; then add 1 cupful of shredded orange and citron peel (candied); cut two pieces from each orange so that the part remaining will represent a basket having a handle; remove the pulp and cut portions of the orange so as not to injure the "basket," which place in cold water until ready to serve. Now fill each basket with the above mixture, covering it with whipped cream sweetened and flavored with orange. Price, 20 cents. (Walter Luick.)

Orangola

Place in a round, glass saucer one slice of a large orange; add one full size (10-to-the-quart) dipperful of vanilla ice cream, stand the two halves of an orange, each half on opposite sides of the cream and dress with orange syrup and whipped cream. Top off with a Maraschino cherry. Sells for 15 cents. (Morris B. Benjamin.)

Key West

Peel a good-sized seedless orange, slice off three slices and lay on a round plate. Over each slice place a spoonful of ice cream, using chocolate, vanilla and strawberry. Shape up round, and over the cream pour Maraschino syrup, topping off with Maraschino cherries. Serve with glass of ice water. Price, 15 cents.

El Capitain

On a long, shallow dish place side by side two slices of orange. On one of the slices place a small 20-to-the-quart disherful of chocolate ice cream, and on the other a tall measureful of vanilla ice cream. The vanilla cream may be formed by filling a tall tapered 4- or 5-ounce glass with the cream, then dipping the glass into warm water and turning the contents out upon the orange slice. Around the cream, but not covering it, place a dressing which is made as follows:

(a) Make a gelatine dessert by cooking 5 cards of gelatine in a quart of water. Before the mixture has entirely cooled, add orange syrup to flavor and sufficient red coloring to tint. This does not make a very solid mixture. (Prepared gelatine may be used to advantage.)

(b) Take a quart of marshmallow (half paste and half syrup) and to this add a quart of the gelatine dessert and 4 ounces of shredded cocoanut. Beat this mixture until the gelatine dessert is broken up into small particles. The dressing is then ready for use.

Price, 20 cents. (B. C. Archibald.)

Orangerbet

In an ordinary mixing glass put one disherful of smooth orange ice and add one and a half disherfuls of vanilla ice cream and a fruit ladleful of whipping cream. Then with an ordinary soda spoon proceed to frappe the mixture, stirring the ingredients well together. Put the frapped mixture into a fancy 10-ounce stem glass, and top off with a little whipped cream and a cherry. This parfait should sell for 20 cents.

The author adds that in his opinion and that of his customers, orangerbet is, if prepared right, the most delicious parfait ever introduced and is always a repeater. The blending of the flavors of the orange ice and the vanilla ice cream could not be finer, the whipped cream giving the desired smoothness. (Julius M. Kortlang.)

Orange Dainty

Take a large orange cut into the shape of a basket and from which the meat has been removed; fill up with orange water ice, spread on a thin layer of strawberry ice cream, and top off with a Maraschino cherry. Serve the basket in a dish of shaved ice to keep it cold. A bow of red ribbon may be tied to the handle of the basket to add to the color effect. Price, 20 cents.

Grape Fruit a la Peru

Cut a grape fruit horizontally in two, remove the fleshy part, section by section, finally cutting out the remaining hard parts Put the fleshy pulp of the grape fruit with a similar quantity of good ripe strawberries into a bowl; add powdered sugar and flavor with curacao, then set on ice cream to macerate for at least 30 minutes. When ready to serve, fill the grape fruit shell with the fruit mixture, and garnish with whipped cream, flavored with curacao. Price, 15 or 20 cents, according to size of fruit used. (Victor B. Miller.)

Malay Mix

Into a long-stem sundae glass place a sufficient quantity each of strawberry, vanilla and chocolate ice cream; over these press a No. 10 cone disher to form all into a cone, around which place thin slices of banana, standing the slices on end, pouring over all some pineapple fruit, and sprinkling on top some walnut meats, coarsely ground; finally top off with a cherry. Can be sold for 10 or 15 cents, according to the class of trade. (J. B. Lytell.)

Special Fig

Take an ordinary frappe dish and in it place a No. 16-to-the-quart ladleful of chocolate ice cream; over the ice cream pour a ladleful of crushed figs, then a ladleful of chopped walnut meats, a ladleful of whipped cream, and top off with a whole ripe cherry. Place a piece of fig cake on one side and serve for 15 cents. (Gus. Schall.)

Two-in-One Beauty

Take a small side dish in platter shape and place in the bottom of the dish one lettuce leaf. Then take a No. 16 cup disher and with it put vanilla ice cream on one end of the dish and strawberry ice cream at the other end. On the vanilla ice cream put one-half ladleful of strawberry fruit; on the strawberry cream end put one-half ladleful of pineapple fruit. Then place one large Maraschino cherry on top of the strawberry ice cream and one creme de menthe cherry on top of the vanilla ice cream. Top off the "Whole Beauty" with a small portion of grated walnuts. Charge 15 cents. Be sure and place fruits in the manner directed so as to make a perfect blend of colors. (C. P. Finkle.)

The Griswold

Take 3 red plums, 3 blue plums, 3 yellow peaches, 2 ripe Bartlett pears, 3 ripe bananas, 1 8-ounce glassful crushed pineapple, 1 8-ounce glassful whole red raspberries, juice of 3 lemons, 1 8-ounce glassful sherry wine, and 1 pint of plain marshmallow. Cut up the fruit in a dish, over it pour the wine and then the marshmallow, adding enough heavy syrup to bring the mixture to the right consistency to serve. If necessary, add a bit of red coloring to brighten the mixture. To serve, take a ball disher, fill it with real fresh fruit peach ice cream and highly flavored coffee ice cream (half and half). Drop the ice cream on a serving dish, pour over it a ladleful of the Griswold blend given above, and "you will have something that will make 'em look wise." A dainty slice of sponge cake may be served with the dessert if desired. (C. L. Hadley.)

The Castle Walk

On a banana-split dish put at one end a No. 16 disherful of vanilla ice cream, and at the other end place a similar quantity of orange ice. Cover the ice cream and orange ice with a dressing made by mixing together 1 pint of marshmallow, 3 ounces of raspberry syrup, 4 ounces of lemon syrup, 2 ounces of cocoanut and 8 or 10 whole cherries chopped fine, the mixture being thinned to the proper consistency with simple syrup. Use one or two, ladlefuls of the dressing; sprinkle on some ground nuts and top with a red and green cherry.

The author states that this dessert has proved to be a phenomenal seller with him. He uses the following window sign:

They All Eat 'Em!
THE CASTLE WALK—20c

(Mason Laurie.)

Queen of Bohemia

Take a small mold (about 3 x 2 x 1 inches), put into it two red and two green cherries in opposite corners and a thin round slice of an orange; in the center of the orange put a festino and then fill the mold with cream of any flavor desired. Place two nabisco wafers on a china platter and empty the contents of the mold on the wafers. Then top off with whipped cream and English walnut, the walnut on top of the whipped cream.

An easy way to keep the cream from sticking to the mold and also to assist in the removal of the cream is first to wet the mold then cut the side with a knife when the cream will fall out. Price, 15 cents. (J. H. Makler.)

My Maid's Favorite

Into an 8-ounce bell glass put 1 No. 12 dipperful of ice cream; take a good ripe banana, slice it over the ice cream (½ inch slices), and over this pour 1 ounce of pineapple fruit; top with whipped cream and a Maraschino cherry, and serve with a long spoon in a glass holder.

The author says that he has tested this formula over his fountain for some time. Price, 15 cents. (Geo. E. Engle.)

Mexican Salute

Into an ice-cream saucer place a small ladleful each of vanilla, chocolate and strawberry ice cream; fill in the center of the plate and around the ice cream with chopped nuts, fruit salad, or any kind of fruit. Directly over the fruit, which should rest in the center of the plate, place a cone-shaped ladleful of water ice. Stick a small American flag in the top of the water ice. The author who is a Canadian, states that this dessert has made a big hit in his city, and believes that it should appeal to the American public at the present time. Sells for 20 cents. (J. Arthurs.)

Soul Kiss

On a small fancy platter place a quarter of a brick of nesselrode or tortoni ice cream; on top of this put some stiff whipped cream in which lay some slices of banana; put a cherry at either end and also in the center, and sprinkle with nuts, if desired. Price, 15 or 20 cents.

Mexican Reminder

Take 1 pound of French candied fruits, 4 cupfuls of water, 2½ cupfuls of sugar, 3 lemons and 4 oranges. Chop the fruit fine; put the sugar and water into a suitable kettle with the rinds of 2 lemons and one orange, and boil for five minutes. When cold, add the juice of 2 lemons and 3 oranges, stir well, strain, and freeze; then stir in the fruit, place in deep-fluted moulds and again freeze hard. To serve, place one of the frozen sections on a fancy plate, cover with pistachio sauce and marshmallow, and top with a cherry. May be served with a Mexican pecan wafer. The following sign was used to advertise this dessert:

MEXICAN REMINDER
Something New at the Right Time

(J. T. Clapesattle.)

Rose of the Orchard

Take a ripe, yellow Bartlett pear, cut off the top and bottom, take out the core, and remove the seeds with a small sundae spoon. Put the small ends of the pear one on top of the other on a plate, and place on them a small cone of peach fruit ice cream. Pour over all a ladleful each of chopped maraschino cherries and pistachio-flavored heavy marshmallow, and put a green mint cherry on top of the cone of cream. Serve on a 5-inch heavy plate, if possible, with rose leaves for the decoration. Sells for 15 cents.

The author of the formula writes that he advertises the specialty by a picture of a large, yellow pear in a wreath of bright red roses on a card 10 x 20 inches, with the words, "Try a Dainty Treat; 'Tis Worth 15 Cents." (C. L. Hadley.)

Ice Cup

Pack a dozen flat champagne glasses or other small tumblers in a tub with pounded ice, and salt around them. Fill these glasses with any fruit syrup, such as raspberry, strawberry, or cherry. Cover the tub with a cloth and leave for 15 or 20 minutes, or until the syrup is frozen about an eighth of an inch in thickness all around the sides of the glass. Pour out the unfrozen syrup and replace the glasses in the ice for a few minutes longer in order to thoroughly set the inside of the syrup case. Turn these ice cups out carefully and fill them with Curacao ice cream, nut ice cream, or any ice of a different color from the cups, and serve

Presidential Delight

Into an 8-ounce colonial stem glass put 1 ounce of chocolate syrup, one 10-to-the-quart disherful of vanilla ice cream, some sliced bananas, 1 ladleful of crushed strawberries, one 20-to-the-quart disherful of pineapple sherbet, all to come level with the top of the glass. Then put one 10-to-the-quart disherful of chocolate ice cream on top, and around the base of the cream in the form of a square put the four pieces of a marshmallow previously quartered. In the center and on top put a maraschino cherry with a small U. S. flag, the flag being raised by thrusting the flagstaff through the cherry. Price, 20 or 25 cents. (Ulysses Degman.)

Need You

Put into a 6-ounce sundae glass one No. 8 scoopful of vanilla and strawberry ice cream mixed; then take a half of a banana and quarter in lengths like a finger; take two pineapple fingers and cut in half lengthwise, and place around the ice cream so that the ends of the pieces will project on the outside of the sundae dish; pour over the dish so prepared a ladleful of crushed pineapple with some sliced bananas, and top off with whipped cream and a couple of fresh strawberries. (J. Casiragh.)

Hug-me-tight

Take a large ripe pear, cut lengthwise, place one half on a small decorated china plate, preferably a heart-shaped plate. Over the pear put a ladleful of vanilla ice cream, then over the ice cream pour a ladleful of mallow cream. Around the cream place walnut halves and top off with a Maraschino cherry. Price, 15 cents. (Fay W. Fraker)

Emerald Isle

Over a dipperful of vanilla ice cream (colored green), pour a ladleful of custard, top with whipped cream into which embed a green cherry; sprinkle over all a little shredded cocoanut and a shaking of nutmeg. Serve with whole wheat Mansfield wafers. To color the ice cream, boil spinach for 3 or 4 minutes, drain, and mash, then strain through muslin.

The custard referred to above is made by using 8 eggs, a gallon of milk and 1 pound of sugar. Let the milk come to a boil on a gas stove or electric heater, stir in a mixture of the sugar and the yolks of the eggs beaten to creaminess, and let the whole come to a boil once more. The boiling point must be carefully watched, for if the mixture stays at that temperature for more than a couple of seconds after the eggs and sugar have been stirred in, the mixture will eventually curdle and settle into soured milk and lumps of eggs and sugar. The use of a double boiler simplifies this part of the work. The custard so made may be flavored in any manner. Price, 15 cents. (Arthur A. Capwell.)

Easter Egg

Cover the bottom of a small round china plate with several leaves of lettuce; upon these place a "bird's nest" prepared with finely spun candy. In the nest place a 12-to-the-quart mold of vanilla ice cream in the form of a setting hen. Around and partially under the hen put red, white, and green cherries to represent Easter eggs. Price, 25 cents. (Ralph S. Hay.)

Darkest Africa

Into an oval dish about 6 inches long place ½ ball of chocolate ice cream, dark in color on one side, and ½ ball vanilla ice cream, placing the two halves side by side; over both balls of cream pour 2 ounces of heavy catawba wine syrup, colored pale green to represent the Congo River. On top of the chocolate cream which is for Africa, place a large white cherry (on a toothpick) to represent the white explorer in Africa; over the white ball pour a small ladleful of chopped green cherries and stick in a few pieces of bark cinnamon to represent the foliage and trees. Now take 8 tiny candy toys, or babies, to represent the natives (can be bought in

New York), placing four on each ball of cream. Over all pour a good ladleful of ground Brazil nuts (niggertoes). Can be sold for 15 cents, but ought to bring 20 cents. By having the ingredients in one place the dessert can be put up in two minutes. (C. L. Hadley.)

Country Club Special

Cover the bottom of a small round china plate with several leaves of lettuce. Upon these place a slice of brick ice cream (8-to-the-quart), vanilla and caramel flavor, and orange pudding. In the center on the brick of cream place two long slices of a fresh peach and cover them with stiffly whipped cream. Sprinkle finely ground walnut meats over the whipped cream and place a whole Maraschino cherry upon each corner of the ice cream. Orange pudding, used in making this sundae, consists of orange cream in which ground walnut meats and small pieces of cherries are frozen. Price, 20 cents. (Ralph S. Hay.)

Bulgarian Dessert

Use a 7-ounce glass; put into it ½ ounce of strawberry syrup, 1 small scoopful of strawberry crushed fruit, 1 small scoopful of vanilla ice cream, 1 small scoopful of chocolate ice cream, 1 spoonful of crushed pecans, cover with chocolate syrup and top with whipped cream, and one green and one Maraschino cherry. Sells for 15 or 20 cents.

St. Jacob's Coat

Fill a sundae glass with plain ice cream in the usual way. Around the rim place one layer of neat, thinly sliced bananas; on top of the bananas and around the cream arrange in the form of a circle whole cherries; then a circle of pineapple cubes, assorted nuts, etc., continuing the operation upward until the cone of ice cream is completely covered. On top place a thin slice of orange, glaze with whipped cream and a dash of grape juice. It takes time to make St. Jacob's Coat, which, with the cost, should not be forgotten in setting the price. (Clinton B. Ellis.)

Walnut Lane Bridge

On a banana-split dish place a No. 12 cone or dipperful of vanilla ice cream and a cone of chocolate ice cream; make a bridge across the two cones of ice cream with two nabisco wafers, pouring over the wafers when placed in position, one ladleful of crushed peaches; top off with marshmallow whip, place a cherry on each end of the bridge and serve with a glass of water. Price, 15 cents. (Macy Wright.)

The Monorail

A mold to form the cream in the shape of a gyroscope or monorail car is necessary. This can be very easily obtained at any hardware store where the tinner will make one for about 75 cents. The size of the mold will depend upon the size of the car he wishes to represent. A colonial style "happy-thought" dish is recommended for dispensing the sundae. The cream when molded should measure 3 x 1 x ¾ inches and have the shape of a car with a seating capacity of eight. The mold is so made that it leaves the inside of the car hollow. Into this cavity is poured a mixture of crushed pineapple and strawberry fruits and over it is sprinkled a few finely ground nuts. Then place small candy Teddy bears around the car—three on either side and one at either end. Then put wto spoonfuls of whipped cream evenly along the center of the car and serve the sundae with three assorted wafers on a small china plate.

The author states that "This sundae sells readily for 25 cents and is a good advertiser. It can be put up very rapidly after little practice." (Philip W. Fraker.)

Panama Delight

Cut a brick of ice cream of three flavors into slices. Take one of the slices and cut into two pieces and place the pieces on the plate 1½ inches apart. At each end push a nabisco wafer down to the plate through the cream, also inserting a wafer in the cream midway between the wafers at the ends. If the cream is hard, start the incisions with a knife. This will represent the locks of the canal. Fill one with raspberry syrup and the other with pineapple fruit; place fresh strawberries or cherries at the four corners and some raspberry fruit around the plate. Sprinkle with chopped nuts, and stick two half toothpicks, each holding the half meat of a pecan nut, in the cream to represent boats. Sells for cents.

The author says that he advertises this specialty by using pictures of the Panama Canal. (Ellis N. Rowe.)

Ovum Upp

Take an oblong pickle dish and place in one ladleful of soft vanilla ice cream; smooth out the cream so as to make it look like the white of an egg; place on the two halves of an apricot (the Wedding Ring or Wishbone apricots are preferred on account of their size and golden color), one at each end or a short distance from the end to represent the yolk of an egg; on one side of the dish place a nice piece of lettuce. Sprinkle nutmeg on the white portion of the beverage to represent pepper and "you will have a very pretty dish and one that will talk for itself."

The author states that if just a little care is taken in putting up this formula it will be pretty hard to distinguish the mixture from the genuine dish indicated by the name he has selected. Price, 20 cents. (P. S. Williams.)

Mutt and Jeff

Take a tall, slender mold, fill it with chocolate ice cream, mold the cream and then let it slide out upon an oblong dish. At the bottom of this molded cream place two chocolate almonds representing Mutt's feet. Now pour chocolate over all this. Next take about one-third of a veronique wafer, stick one end of a toothpick into it, and then stick this in the cream. This is Mutt's neck. On top of the wafer place a white marshmallow. That's all of Mutt.

Now for Jeff. Take a small dipper of vanilla cream and place it beside Mutt. Stick a couple of chocolate peanuts at the base of the cream for Jeff's feet. Pour a smooth, thick marshmallow dressing over this, then proceed to finish just as Mutt, with the exception of having the neck a little shorter.

When properly made this is a comical dish, and one that "takes." This feature is worth 25 cents. (R. C. Sellers.)

Lobster Delight

On either end of a fancy plate place lettuce leaves so that the half of each protrudes over the side. Take an ice cream cone, break it apart to simulate a "shell." Lay the shell in middle of the plate, and then with a No. 10-to-the-quart disher put in a mound of one-half strawberry and one-half vanilla ice cream, placing the cream partly on the shell and partly on one of the lettuce leaves. Cut a Maraschino cherry in two and lay the hemispheres on cream so as to make two "eyes." To represent the "mouth" employ a whole cherry. Take half a banana, slice down the center and use the two pieces thus formed to make the claws, laying them in the corners of the shell on the side of the ice cream. Then take two nabiscos and lay them crossed on a lettuce to constitute a side lunch for the salad. Sells for 20 cents.

The author says the Lobster Delight takes about two minutes to prepare if the cones are already made into shells and the lettuce is ready for use. (Morris Bialac.)

Club Sandwich

Have an individual mold made by a tinsmith. He may use for a model a small ice cream sandwich mold, making it three inches wide and two and one-half inches long. Have the bottom plate made to fit very closely and perfectly flat on the inside so as not to retain any soft cream or water that may accumulate during the rush hours. Take two saucers, one smaller than the other, put a napkin between them, place a fresh, crisp lettuce leaf on the top saucer, then proceed with the sundae.

Cut a slice of orange, trim all the rind off carefully and put it on the bottom of the mold. Place a creme de menthe cherry in each corner and fill mold half full of vanilla ice cream. Then cover with two nabisco wafers, several slices of pineapple (creme de rose pineapple adds to the color scheme), and fill balance of mold with orange sherbet or water ice. Press firmly, turn out and place before your customer. Always be careful to thoroughly drain your fruit before using and it works easier if chilled. Should the sandwiches be desired to fill outside orders use lady fingers instead of wafers.

Chestnut Frappe

Into a regular frappe dish put a ladleful of sliced peaches and cover with whipped cream. Then take a sphere of chocolate ice cream and push it down into the whipped cream so that it cannot move out of the center of the dish. With a small knife cut the chocolate ice cream into quarters, pulling each quarter open to represent the opening of a chestnut burr; then drop into the center or opening thus made a few shelled marrons. Place a nabisco wafer alongside of the ice cream and serve. Sells for 15 cents. (Sterling Miller.)

Billiard Dessert

On a small china plate place two ladlefuls of chocolate whipped cream; on the cream lay a thin slice of a 2-quart brick of light green pistachio ice cream; then press the ice cream on the whipped cream so that some of the latter will be squeezed out under the sides of the ice cream. This represents the top of a billiard table. Place in different positions on top of the slice of pistachio cream three spheres of ice cream about the size of English walnuts, one sphere being made of strawberry ice cream, the other two of vanilla ice cream. These represent the billiard balls. On the cream near one of the spheres of cream lay a "sunshine veronique" sugar wafer stick to represent the billiard cue. Serve. Price, 15 cents or more.

The author uses a window sign of heavy paper lettered as follows to advertise the frappe:

A CUE FOR YOU!
Try our Billiard Frappe
15 Cents
At the Fountain.

(Sterling Miller.)

Chocolate Whip

Pour about one-third of a glassful of ice cold rich milk into a 12-ounce glass (straight glass preferred), place the button of the electric mixer on the surface of the milk, and hold it there until the milk becomes thick and creamy, and its volume increased to within an inch and a half from the rim. Flavor to suit with chocolate while mixing; add one dipperful of chocolate ice cream (24 to the quart).

The author calls this a product of the electric mixer, and writes that with a little practice this drink can be made quickly. Serve with a long spoon and a glass of water. Sells for 10 cents. The author also states that he dispensed the beverage for some time before he realized its value. He believes the formula deserves consideration for the reason that it took and that in spite of the fact that a cold special dispensed in the dead of Winter is usually a failure. He writes that it is not an uncommon occurrence for him to have eight or nine orders for this specialty out of every eleven or twelve orders he receives. The cost anywhere in the United States will not exceed 4 cents, and it will readily sell for 10 cents; the profit is larger than on ice-cream soda and the demand, the author states, is three times greater. (Alex McDonald.)

Chocolate Puffee

In a tall parfait glass draw an ounce of heavy chocolate syrup; add a medium ladleful of whole pecans, then a spoonful of chocolate ice cream, leaving the spoon in the glass for mixing purposes. Fill the glass with good, heavy whipped cream, and well mix all with the spoon so as to thoroughly distribute the chocolate flavor, which can be done very quickly. Then top with a ladleful of whipped cream, smoothing over the top to give the dish a neat appearance. Sprinkle with ground nuts and place a cherry or a frou-frou almond on top. By using claret syrup, instead of chocolate syrup as given above, a "claret nut puffee" may be made. In fact, the customer can be given any flavor he may desire. Charge 15 or 20 cents. (W. B. Moreland.)

Fifth Avenue

Take a cake of Huyler's frozen chocolate or Buiscuie; with a small spoon place a small quantity of whipped cream on each corner of the cake. With the end of the spoon dig a small hole in the middle of the cake and fill with crushed strawberry. On top of the whipped cream put a cherry pierced with a toothpick. Serve the dish with two nabiscos cut in halves, a half on each side of the dish. Charge 20 cents. (F. J. Beaucoudray.)

Marble Brick

Cut lengthwise into two pieces a slice of marble brick ice cream (strawberry, chocolate and vanilla). Put one of these pieces on a banana-split dish, and cover with a thin coat of chopped English walnut meats, placing over the latter some marshmallow dressing. Then pour some thick chocolate syrup over the marshmallow dressing, allowing the syrup to run down through the dressing to give the dessert an artistic appearance. Top with a red and green cherry. Sells for 15 cents. (J. T. Clapesattle.)

The White Hope

To dispense this sundae, use a mold which will give a brick of ice cream 2½ inches high and 2 x 2 inches on the top or base. Such a mold can easily be made by any tinsmith. Place a layer of vanilla ice cream one inch thick on the bottom of the mold, then a mixture of strawberry fruit and nuts, and finish filling the mold with an inch and one-fourth layer of rich, chocolate ice cream. Turn out the mold on a white china plate, top with whipped cream, and red, white and blue cherries. Lay a chocolate wafer on one side and a vanilla wafer on the other side of the dish and serve. (Philip W. Fraker.)

Real Temptation

(a) Take one quart of light cream, boil and add two pounds of sugar; then beat up the yolks and whites of five eggs separately, mix with the cream and sugar and boil the mixture for five minutes; let it stand over night in a cool place, and skim it off the next morning.

(b) Take six ounces of roasted peanuts and four ounces of peanut butter and rub into a paste in mortar, adding about three ounces of water. Gradually mix a and b together until a rich peanut custard is produced.

(c) Take 1 quart of milk, bring almost to a boil, add 3 pounds of sugar and remove from the fire; put one pound of cocoa in a mortar and gradually work into it the hot sugar and milk (about one pint) until a very smooth thick paste results; take one-half pound of butter, heat until dissolved and then work it into the chocolate paste; add the balance of the milk and sugar slowly while mixing. When thoroughly mixed, boil for about 15 minutes. This makes a chocolate fudge which should be kept warm in a chafing dish or double boiler.

To serve, put a cone of vanilla ice cream in a sundae dish; cover half of it with peanut custard and the remainder with chocolate fudge (one side light, the other dark); top off with whipped cream, chopped pecan nuts and a cherry; place two small size nabisco wafers so as to meet on top. Price, 20 or 25 cents. (John Fox.)

Sensation Chocolate

Scrape or cut up four ounces of cocoa paste; put it in a bright stew pan with half a tumbler of water; reduce it to a very smooth consistency over a moderate fire, stirring continually with a spatula, and be very careful not to burn or scorch it; then add one quart of the richest cream and eight ounces of pulverized sugar; boil together for eight or ten minutes, stirring without ceasing; remove from the fire and add one ounce of strong vanilla sugar. When ready to serve, fill cups half full of whipped cream, staunch, well drained and highly flavored with vanilla sugar; pour the hot chocolate upon it; stir together and top off with more of the whipped cream and serve immediately with some zweiback biscuits, which are the proper accompaniments of all table chocolate. Price, 15 cents.

DESSERTS WITH CAKES, ETC.

Pineapple Bon Bon

Into a plain white saucer place one slice of pineapple, cut round; on this put a No. 12 mold of vanilla ice cream, and surround it on three sides with three sponge lady fingers (small ones are best); over all pour a ladleful of crushed pineapple with the thick, sweet juice, and finish by placing a red cherry on top. Sells for 15 cents. (Lamar B. Talley.)

Hobble Bon Bon

Into a glass about 4 inches deep place a small amount of chocolate, vanilla or strawberry ice cream; split two lady fingers and stand the four halves on end in a vertical position, so that the upper ends will reach the top of the glass. Add about ½ ounce of chocolate syrup, or syrup of any flavor desired, one disherful of vanilla ice cream, whipped cream, one teaspoonful of English walnuts and top off with a slice of fig or a Maraschino cherry. In pricing this feature be sure to at least cover the costs. (J. E. Stallings.)

Bell's Special

Take one pint of marshmallow and syrup, q.s. to make the dressing. Then incorporate about 2 ounces of crushed cherries, 4 ounces of ground nuts, and 3 crushed bananas. To serve: Place in the center of a 6-inch plate one piece of plain cake (about 4 x 4 inches), and on top of it put one No. 12-to-the-quart dipperful of strawberry ice cream. On each corner of the cake put a lady-finger cracker and top off with the preceding dressing. Scatter a few strawberries around the top of the cake in suitable places. Can be sold for 20 cents and will yield a good profit. (A. Karl Bell.)

Charlotte Russe with Nuts

Sweet cream, 40 per cent, 1 quart; powdered sugar, 6 ounces; extract of vanilla, 2 fl. drams; ice cream powder, 2 teaspoonfuls; chopped nuts (very fine), 6 ounces. Mix by whipping the cream until almost stiff with the sugar, ice cream powder and extract, then add the chopped nuts and whip until the mixture will stand. Having previously ready 1 dozen ice cream saucers, take 24 lady fingers, slice them into halves and place four of the halves around on each saucer and fill the center with charlotte russe. Then take a small quantity of whipped cream, colored a light red or pink, and decorate the dish, topping off with a Maraschino cherry. Sells for 15 cents and yields a nice profit. (Jos. H. Wadsley.)

Square Meal

Take three lady fingers and halve them

lengthwise. Lay two halves on a six-inch plate and lay the other halves across the first two at right angles to them, thus making a criss-cross pile. Over this place one dish of vanilla ice cream (about 6 to a quart); cover with "bitter sweet" chocolate and top off with a Maraschino cherry and two walnut halves. Price, 15 cents. (W. Arthur Goulding.)

LADY FINGER DESSERT

Stand four lady fingers upright around a paper case. Fill center with strawberry ice cream and top with a cherry. Price, 15 cents.

MASTERPIECE

Line a champagne sundae glass with four or five split lady fingers in upright position, and then put into the center a disherful of Neapolitan ice cream, made by filling the disher with equal parts of vanilla, strawberry and chocolate ice cream; over all pour a ladleful of vanilla marshmallow, or cover with whipped cream and close to the top insert peaches, the slices pointed toward a cherry placed in the center. Price, 15 or 20 cents. (Jos. B. Clark.)

MILADY

Place on one end of an oblong or "banana split" dish two lady fingers, side by side; cover each with another lady finger using four in all. At the other end of the dish place a 12-to-the-quart disherful of rich vanilla ice cream. Over the lady fingers and ice cream pour two ladlefuls of fresh strawberries, and finish by pouring some whipped cream on the lady fingers. Can be sold at a profit for 15 cents. (C. E. Wilber.)

FRENCH GLACE FRUIT

On a platter 10 x 7 inches place three slices of angel food and on each of slices put a small disherful of vanilla ice cream. On each of the two outer portions place pineapple and strawberry fruit, respectively. Over the center portion of ice cream put whipped cream and over all sprinkle chopped pecans. Top off with two Maraschino cherries. Then on one side of the platter place a fourth of a slice of pineapple fruit and mixed imported French glaced fruits. Price with due regard to costs and work involved.

The blending of the French fruits against the white background makes the sundae look very attractive. The French fruits are cut in small dices and preserved in simple syrup to keep them soft. (Miss Anna Finigan.)

MAUDE ADAMS

Chop and mix well together in a small bowl five bananas, four oranges, one apple, a small bunch of grapes, one ounce of cocoanut and 30 cherries. Add one ounce of sherry wine for flavoring, one-half pound of sugar, 1 ounce of cherry syrup, and 6 ounces of simple syrup. Put the mixture into a fruit bowl and let stand an hour before serving. To serve, place on a plate one slice of angel cake and a 12-to-the-quart dipperful each of chocolate and vanilla ice cream; then over the ice cream and cake add a ladleful of the mixed fruit and top off with whipped cream, a few walnut meats and a cherry. Sells for 15 or more cents. (Wesley Smith.)

ANGEL OF EDEN

Place a thin slice of angel food cake in a sundae dish and over the cake put a small scoop of vanilla ice cream and 1 ladle of finely chopped Maraschino figs, previously prepared in a fruit dish. Over all put another slice of angel cake and pour on ½ ounce of sherry syrup and 3 or 4 dashes of claret wine. Price with due consideration to costs.

NORTHERN LIGHTS

In dispensing the Northern Lights use a fine china plate, six inches in diameter, decorated with a winter design (ice and snow). First, place a piece of angel food on the plate. Around the angel food lay three slices of orange, on the first of which place a red cherry, on the second a white cherry and on the third a blue cherry. Now place a (large size) mold of ice cream on the cake and insert in the top of the ice cream a Veronique wafer, leaving about one inch to appear above the cream (this is to represent the pole). Stick a small American flag on the top of the pole.

Place three spoonfuls of pineapple ice around the bottom of the cream between the three slices of orange. Then spread whipped cream over the top of the mold of ice cream just below the pole, so that it looks like snow. Lastly, arrange four chocolate "Teddy Bears" around in the whipped cream so that they appear to be trying to reach the pole—one at the very top. Sells for 20 cents. (Philip B. Fraker.)

DESSERT A LA PLAZA

Take one slice of vanilla ice cream (10-to-the-quart), one slice of pound cake similar in size to the slice of cream, some crushed pineapple syrup, and whipped cream with a little sugar and a few drops of Maraschino liquor added to it. Now spread two teaspoonfuls of the pineapple syrup over the cake; over the syrup put the slice of ice cream, trim on the side and cut across from corner to corner. Put some of the whipped cream on a dessert plate and on it lay the sandwich, the cream on top, and add a little fine whipped cream in the center apple syrup. Place a little whipped cream in the center of each piece of the sandwich and top off with two cherries; 20 cents. The author says this has proved to be a most attractive and delicious special, and that some days he has sold as many as 250. He charged only 15 cents. (D. Negri.)

RENO CHOCOLATE DROP

In a fine china dish, saucer-shaped, place a slice of chocolate cake 2½ inches square and ⅛ inch thick. On the cake place a No. 10 mold of chocolate ice cream, around which arrange four chocolate drops. Top off with whipped cream and red cherry and put two dashes of blood orange syrup over all. "A good seller at 25 cents." (Philip W. Fraker.)

CHOCOLATE SOLDIER

Place a mold of chocolate brick ice cream on a fancy Melba plate and on it lay a slice of devil's food cake. Over all pour a float of chocolate syrup and top with a Maraschino cherry. "A very delicious and dainty dish when correctly served. Sells for 15c." (Everett Kelley.)

FIFTH AVENUE SUPPER

Take a quart brick ice cream mold and cover the bottom with a layer of strawberry ice cream about an inch thick; on this place a layer of sponge cake about half an inch thick; covering it with a layer of chocolate ice cream; then add another layer of sponge cake and top off with vanilla ice cream. Pack away the mold in ice and salt for about an hour, when the delicacy will be ready to serve. Cut the mixture in four slices; serve in oblong dishes, pouring a ladleful of crushed strawberries over the slice and topping off with whipped cream and a cherry. Price, 25 cents a slice. (Clyde J. Klingelsmith.)

DAFFODIL

Take eight pieces of 5-cent sponge cake, cut off the brown crust and chop the cake to fine crumbs; take 6 eggs, beat them up well, and then mix all well with 3 ounces of shredded cocoanut, 6 ounces of bisque and 6 ounces of pineapple syrup. To serve, take a 4-ounce claret glass with a tall stem, and put into it on the bottom, a spoonful of the mixture, add a 16-to-the-quart dipperful of vanilla ice cream, pressing it down to conform to the shape of the glass and leaving a hollow or cavity in the center. In the hollow put 3 pieces of cake, and top with a little more of the mixture and a cherry so as to resemble a daffodil. When in season a daffodil can be given with each dish of the sundae served.

The sponge cake is most economically prepared by taking the whole cake, cutting off the brown crust, and slicing the cake lengthwise so as to make eight pieces; then cut each of these pieces in the center, which will make 16 pieces in all. Price, 20 cents. (K. C. Bronson.)

CREAMED APPLE SPONGE

Peel six large apples; grate four of the apples (squeeze lemon juice over grated apple, so latter will hold color) and chop the other two; add to them 3 ounces of vanilla syrup, and enough whipped cream to make one-half gallon. To serve, take a five-cent piece of sponge cake, cut it in two and place the pieces in a glass saucer; on top of the cake put a No. 16-to-the-quart dipperful of vanilla ice cream and cover with the apple mixture; top off with a Maraschino cherry. Price, 15 cents. (Peter Eichelman.)

RECALL FRAPPE

In a china saucer place a piece of sponge cake, about 1½ inches square. Over it pour ½ ounce of claret sauce. Then place a twelve-to-the-quart scoopful of vanilla ice cream on the cake and over this a ladleful of fresh strawberries. Cover with whipped cream and top off with dry walnut meats. Sells for 15 cents. For advertising this frappe Mr. Bromley uses a card lettered as follows:

Up to the minute
the
Recall Frappe
15c

(D. G. Bromley.)

STRAWBERRY DELIGHT

Take a sponge cake, cutting eight pieces or slices to the pound of cake. Put one piece of the cake cut in halves on a small plate (such as is used for a banana split), and on each half of cake place a dipperful of fresh strawberry ice cream (No. 20 to-the-quart). Over this pour fresh strawberry syrup, then add whipped cream, topping each cone of ice cream with a whole strawberry. Sells for 10 cents and costs, according to the author's figures, 6 cents to produce, as follows: Sponge cake, 2 cents; ice cream, 2 cents; fresh strawberries, 1 cent, and whipped cream, 1 cent. The author used this announcement:

STRAWBERRY DELIGHT
Contains Fresh Strawberry Ice
Cream, Fresh Strawberries,
Sponge Cake & Whipped Cream

STRAWBERRY WHIP

Fresh strawberries, 1 cupful; powdered sugar, ⅓ cupful; whites of 2 eggs. Wash and hull the strawberries and mash slightly. Beat the whites of the eggs until stiff, add sugar and berries; beat until very stiff, using a broad bowl and a wire egg beater, beating with a long and steady stroke. Pile lightly in a glass dish and serve with white or sponge cake. Price, 15 cents.

MOONBEAM

Place a No. 8 scoopful of fruit-cake ice cream in a sundae dish and on this put whipped cream to form a half-moon on one side; on the other side place a few walnuts and top off with a red cherry on a toothpick.

Here is the formula for the "fruit cake ice cream": Sugar, 3 pounds; ice-cream powder, any standard make, 4 ounces; sweet cream, 20 per cent., 2 gallons; sweet milk, 1 gallon; raisins, currants, figs, dates, citrons, of each 4 ounces; allspice, ½ teaspoonful; brandy, sufficient to flavor; caramel, to color brown. Cut the fruit fine and mix with the flavor. (J. H. Wadsley.)

DESSERT A LA COPLEY SQUARE

Serve individuals of vanilla ice cream in this manner: Secure dainty white paper cases of a square shape; half fill a case with ice cream and then introduce a spoonful of guava jelly or a layer of chopped nut meats and figs. Fill the case even full of ice cream. Mound the top with whipped cream and garnish with four blanched almond meats arranged like the petals of a flower and with a bit of candied citron for a center. Lay on one side of the plate a spray of crystallized mint, also a square piece of delicate white cake frosted with white and decorated with a slight touch of pale green frosting. This feature is worth 25 cents.

MACAROON DELIGHT

Fill one-half of a macaroon shell with bisque ice cream and one-half with tutti frutti ice cream. Surround the macaroon with whipped cream in which has been placed a number of fresh strawberries, selling at 20 cents. (Clarence Bess.)

CREAM PUFF

Take 2 quarts of sweet milk, heat, then add four eggs previously beaten up, stirring the mixture constantly, then add 1½ pounds of sugar, and bring the whole to a boil; now add 4 tablespoonfuls of cornstarch (previously rubbed up with enough water to dissolve it,) stirring constantly all the while so as not to allow the mixture to scorch or burn, and when it thickens, remove from the fire, and add 10 teaspoonfuls of vanilla extract. Then stand in an ice box and let cool. An asbestos mat may be used to keep the mixture from burning when cooking on the stove, although the sundae mixture is best made in a farina boiler. To serve, take the half of a cream puff shell, lay it in a Colonial sundae cup, and cut crosswise into four pieces. This obviates the necessity of the customer attempting to cut the shell into smaller pieces with his spoon. Put a No. 16-to-the-quart dipperful of strawberry ice cream on the pieces of cream puff shell and top with the above mixture and a cherry. Sells for 10 or 15 cents.

The author states that he also serves a chocolate eclair sundae with the same mixture and in the same manner, the only difference being that he uses vanilla ice cream instead of strawberry ice cream, and tops the whole sundae with chocolate syrup. (Peter Eichelman.)

PEACH CREAM PUFF

Take an empty cream puff shell, cut the bottom out and place it on a sundae plate. On the shell put a disherful (20-to-the-quart) of peach ice cream, add a small portion of whipped cream and about two quarter portions of a small peach; over all pour a little peach syrup and cover with the top of the shell; then put a little whipped cream over this shell and top off with a quarter of a peach and a Maraschino cherry. Sells readily for 15 cents.

The author states that the cream puff shells can be bought at any pastry shop. (Wm. H. Anders.)

ICE CREAM CHARLOTTE

Take an empty charlotte russe cup, and place in it two lady fingers cut in halves, standing the pieces on the narrow ends. Then fill up the cup as follows: One dipperful of vanilla or bisque ice cream, over which pour charlotte dressing until the cup is filled; then place one cherry on top. The dressing for the above is made by dissolving ¼ ounce of gelatin in hot water, and then heating the solution with whipped cream, 1 quart; yolk of one egg well beaten; pulverized sugar, 1 ounce, and sherry wine, 1 ounce. Keep all in a cool place until wanted for use. Price 15 cents.

SURPRISE ECLAIR

On a five-inch plate place a lettuce leaf. Cut an empty eclair shell which can be purchased from any bakery, in half and lay the bottom half on the lettuce leaf on the plate. Then put one disherful (16 size) of ice cream on the shell and over the cream put the top part of the shell. Over this pour a little chocolate syrup and decorate with a slight sprinkling of cocoanut, whipped cream and cherry.

ECLAIR DELIGHT

Cut an eclair shell in two lengthwise, place on a banana split dish and fill with delight ice cream. Place top on the shell and cover with a ladle of marshmallow whip. Dust over all a sweet powdered chocolate and top with a couple of red cherries. Sells for 25 cents.

Delight ice cream, used in the above, is made as follows: Take one gallon of vanilla ice cream, slice into it 10 ripe bananas, then add 6 ounces of maple syrup, 1 pound of chopped pecan nuts (meats), add ½ pound of seeded Muscat grapes which have been previously soaked in simple syrup for three hours. Mix all well together, place in a storage can and keep hard. (Harry G. Frame.)

CREME DE LA CREME

Rub the peel of a large lemon on 6 ounces of loaf sugar, pound the sugar with the juice of a lemon, add half a pint of double cream and whip until very stiff. Pour into punch cups with handles and set on ice for a few hours before the evening rush is on. Serve cup on plates with two nabisco wafers and two toasted marshmallows.

ICE CREAM SANDWICH

Take two nabisco wafers, chocolate, vanilla or strawberry, whichever the customer may prefer, and place a slice of ice cream between them. Serve on a small plate with an ice cream fork. It is necessary to have a regular ice cream sandwich mold to make a neat service.

HAYSTACK

In dispensing "Haystack" use a fine china plate of rose design decoration and measuring six inches in diameter. For the base of the stack use a piece of chocolate cake about 2½ inches square; on this place a mold (large size) of vanilla ice cream. On each of two sides of the plate place a slice of orange and on each of the other two sides lay a slice of banana. Pour over the cream a heavy caramel syrup, sifting over it shredded cocoanut which has been previously browned. On top of the stack put a Maraschino cherry and lean against the sides of the stack so that they will come to a "peak" four Veronique wafers, arranging them so that the cherry appears to rest on top of the wafers. Around the base of the stack arrange four Maraschino cherries, put a little whipped cream on the slices of orange and insert a spoon in the side of the stack. Price, 25 cents. (Philip W. Fraker.)

GOODNERS CEREAL CREAM

Fill mixing glass two-thirds full with soft ice cream; add quantity desired of malta-vita or egg-o'see, and mix with bar spoon. Transfer into sundae glass or large sherbe cup and serve.

TEASER LUNCH

Take one whole shredded wheat biscuit, place in deep saucer. Vanilla syrup, 1 ounce; malted milk, 1 heaping teaspoonful; 1 egg and enough milk to fill glass, then shake together, strain and pour over the wheat biscuit, allowing plenty to stand in saucer, and sprinkle powdered sugar over. Price, 15 cents.

JELLO AND GELATINE DESSERTS

BERRY JELLY

Dissolve one package of strawberry flavored gelatin in a pint of boiling water and add half a cup of sugar. When it begins to set fold in a pint of whipped cream. In tall stemmed glasses place a spoonful of ripe berries, a spoonful of the hardened jelly and a topping of vanilla ice cream. Price, 10 cents.

ITALIAN TUTTI FRUTTI

Soften one teaspoonful Knox's sparklin gelatin in one-half cup of cold water. Di solve in one quart of hot water and add tw cups of sugar. Add strained juice of three lemons and four oranges. Stir in one pound of mixed candied fruit which has been soaked several hours in cherry juice. Set in individual cups to harden. Price, 10 cents.

Mousse avec Parfait D'Amour

Place into a bowl 12 ounces of pulverized sugar, 4 whole eggs; beat the mixture up well, then add 1 quart of double cream. 3 small glassfuls of parfait d'amour liquor and a few drops of red color. As soon as the sugar is well dissolved set the bowl on ice and beat and finish. Any kind of fancy liquor or flavor may be used with advantage, only great care should be taken that the sugar is entirely dissolved in the composition before it is set on ice to be beaten up.

Neapolitan Glace

Take a quart-brick mold; place a layer of strawberry ice cream in the bottom, then a layer of glace fruit, then a layer of pineapple sherbet. Fill the mold with stiff whipped cream, colored green and flavored with creme de menthe. To serve put a lettuce leaf on a small salad plate, cut off a slice from the brick and serve with wine jelly. Sells for 25 cents. (E. M. R. Brown.)

Ruby Salad

Simmer until tender two pounds of juicy pitted cherries with one and a half cups of cold water and three cups of sugar. Remove from fire and add one ounce of powdered gelatin dissolved in a cupful of boiling water. Make a deep ruby color with a pure food red coloring. Add two ounces of rose extract. Mold in oblong brick. Serve in slices on lettuce leaves, dress with equal parts of whipped cream and mayonnaise and garnish with ripe cherries.

Creme Noyau

Blanch about ¼ pound of Jordan almonds and 1 ounce of bitter almonds and threw into cold water. Rinse well and pound in a mortar with two ounces of powdered sugar and four ounces of cream. Mix well together and rub through a sieve into a basin, add one pint of cream, whipped, and flavored with noyau, and an ounce of dissolved gelatin. Pour into a mold, set on ice and serve at any time after the mixture has set.

Creme de Roma

One-third box of any good gelatin, 1 cupful of rich milk, 1½ cupfuls sugar, 8 eggs, flavor with vanilla. Soak the gelatin in the milk for an hour, then put a quart of milk on to boil, stir in the yolks of the eggs, well beaten, and then sugar and gelatin; when the mixture begins to thicken take it off and pour into a deep bowl in which the whites of the eggs have been beaten to a stiff froth. Mix well together and flavor to taste. Put in molds and allow four hours to cool. May be served with or without cream.

A and A Special

One individual brick of Neapolitan ice cream, topped with a salad made from jello, sliced bananas, oranges and pineapple served with sugar wafers. (W. N. Maher.)

Society

Take a small one-ounce package of sparkling gelatin and place it in a pint of cold water, then add one pint of boiling water and stir until the gelatin is dissolved. Now add to the solution one pint of a mixture made of grape juice, figs, berries, pineapples cut in cubes, cherries, dates, nuts and thin slices of limes. Pour the mixture into 8-ounce parfait glasses and set in an ice box to cool. When the mixture has solidified or "set" it is ready for dispensing. To serve, place a No. 16 scoopful of vanilla ice cream on top of each sundae, cap with whipped cream, halves of pecans and a green creme de menthe cherry. Sells for 15 or 20 cents. (Ellis N. Rowe.)

Strawberry Molds

Express two or three quarts of fresh strawberries through a fine sieve; add two ounces of dissolved gelatin and the juice of one lemon and stir the whole on ice until the mixture begins to thicken. Pour into a cylindrical mold previously thinly oiled with sweet almond oil, and set in a cool place or on ice to cool. Shortly before serving dip the mold in hot water and turn out on a shallow dish. The top may be garnished with sugar or whole strawberries on leaves. Raspberries may be treated in a similar manner, and any kind of almond wafer or fancy cake may be served with these molded fruits.

Ye Quality Special

Into a cup put one tablespoonful of gelatin, and one red color tablet enclosed with the gelatin. Fill with boiling water, allow to cool, and after becoming thoroughly dissolved, strain into a large earthen mixing bowl. Add the unbeaten whites of two eggs, five heaping tablespoonfuls of powdered sugar, and one tablespoonful of vanilla extract. Beat from 20 to 30 minutes with a wire egg whip until very light. Cut up one can of Hawaiian pineapple into cubes, free from juice, and add to the gelatin and egg mixture, stirring well. Place the whole on ice, and allow to ripen till next day.

To serve at the fountain, place a small disherful of vanilla ice cream on a dessert dish, over this pour a small ladle of marshmallow dressing, and a ladleful of the above dressing; then pour on some crushed pineapple, a tablespoonful of whipped cream, with a little strawberry syrup. Top off with chopped walnuts and a creme de menthe cherry. This dessert should be sold for 25 cents. (Miss Anna C. Fuchs.)

Grape Junket

Heat slowly to blood heat a quart of fresh milk, sweeten to taste, flavor with a teaspoonful of strained orange juice and turn into a large mixing bowl. Crush and dissolve one junket tablet in two tablespoonfuls of lukewarm water, stir it quickly into the milk and set the mixture aside, being careful not to jar it, until it is firm. Have ready a pound of Concord grapes that have been freed from the skins and seeds, blend them with a large cupful of stiff meringue and when ready to serve, fill slender chilled glasses, using alternate spoonfuls of the fruit and junket. Garnish each glass with a tiny pyramid of sweetened whipped cream colored with a little unfermented grape juice. Price, 15 cents.

Peaches and Cream

To one quart can of sliced peaches (cut fine) and syrup add one quart of boiling water, one pound and a half of sugar and juice of four lemons. Bring to a boil and simmer a few moments until peach bits are tender. Cool and add one-half pound very finely chopped English walnuts. When mixture has begun to freeze, fold in a pint of whipped cream. Serve in tall glasses and decorate with a cherry.

North Pole Bananas

Slit the skins of any desired number of bananas and take out the edible portion of the fruit without destroying its shape; mash to a pulp, and to each cupful add a pint of whipped cream and powdered sugar to taste; fill the skins to their original shape and pack in ice two or three hours before serving. Price, 20 cents each.

Orange Jelly

Peel the oranges and run them through a fruit press, if you have one; if not, cut the oranges in two crosswise and rub the juice and pulp through a sieve. A lemon squeezer or any device of that sort will not do, as the pulp must be taken with the juice. If you have 2 quarts of juice and pulp, cook it down to 3 pints, then add sugar and treat as any other jelly. Of course, the white of the orange makes it bitter.

Nomination

On a fancy 6-inch plate lay two slices of fruit dessert lengthwise. On this place a 16-to-the-quart dipperful of ice cream and put two more slices of the dessert on each side of the cream. Cover with a spoonful of good sweet chocolate and lay a Maraschino cherry on top. For making the fruit dessert, take a pint of boiling water and into it stir a box of jello, any desired flavor. When the mixture is nearly ready to set, stir in a few English walnuts and Maraschino cherries. Then pour the mixture into a square dish about the size of the slices desired and cool until ready to slice. This sells for 15 cents. (Logan Taylor.)

Marron Whip

One box of sparkling gelatin soaked in two cups of cold milk five minutes. Add beaten yolks of eight eggs to two cups of plain hot milk and bring to a boil. Combine softened gelatin and egg mixture. Whip two quarts (possibly 3 pints will permit product to set better) of cream and add four cups of sugar, two tablespoonfuls vanilla and gelatin mixture. Fold in beaten whites of eggs and four cups of prepared French chestnuts. Very pleasing and unusual. Price, 20 cents; more if you can get it. (Henry J. Burke.)

Pineapple Glaze

To one box of pineapple jello add a pint of boiling water, and set in a refrigerator until nearly hard; then add the beaten whites of two eggs and one pint of crushed pineapple fruit, and set the mixture back into the refrigerator until it becomes hard. To serve, place one ladleful of vanilla ice cream in a sundae dish and over it put a large spoonful of pineapple glaze, prepared as above. Cover the top with whipped cream and place on the summit a Maraschino cherry or a cube of pineapple. Charge 15 cents. (Miss Florence Rae.)

Snow Pyramids

Beat the white of 12 eggs to a stiff froth. Add a glassful of currant or lemon jelly and whip all together. Serve on individual ice cream dishes, first putting on each a large spoonful or layer of vanilla or strawberry ice cream. Top off in pyramid shape with the whipped egg and jelly preparation.

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(10) Sundae Toppings

In no department of fountain work has greater progress been made during the past few years than that of sundae toppings, and this new section in this formulary attests to the advances in this direction.

The introduction of the chop suey topping was an epoch marking event. This was followed by the use of the marshmallow dressing. These two innovations had important results in the development of the sundae topping. From the chop suey dressing have come a host of attractive formulas of the fig and nut type, while from the marshmallow have come the popular maple and butterscotch dressings.

In making up special or standard sundae toppings the dispenser must remember that all are very liable to spoil. Time, trouble, and money will be saved if only one day's supply is made up at a time. It is the height of foolishness to serve a dressing that has begun to turn. Many of these dressings are of a character that calls for costly ingredients—nuts, French candied fruits, imported gingers, figs, and other delicacies—and it will soon wipe out a lot of profit if half a bowl of this must be thrown out at the end of every two or three days.

The more careful keeping of dressing would also reduce this waste. There is no excuse for keeping a dressing in any but covered bowls. Especially in hot weather, it would be wiser if the bowls were set in ice rather than on the top of the counter. Stopping the leaks of wasted material through spoilage has turned more than one fountain from a money loser into a money maker.

TOPPING

Chocolate

Cut up one-half pound of cake chocolate in one pint and a half of milk. Place in water bath until smooth. Add half a pound of sugar into which a teaspoonful of powdered arrowroot has been mixed. Cook thoroughly. Flavor with five drops of extract of cinnamon. Good on plain creams.

Coco-Marsh-Nut

Mix one cupful of powdered chocolate with three cupfuls of simple syrup. Let the mixture come to a boil, then beat in sufficient marshmallow whip. When about cold add one cupful of walnuts chopped not too fine. To serve, put one scoopful of ice cream in an ordinary sundae dish and over it pour one ladleful of the above chocolate marshmallow nut mixture. If desired a Maraschino cherry may be placed on top of the mixture to give it a more attractive appearance. (William H. Sullivan.)

Bitter Chocolate

Cocoa, 2 pounds; sugar, 5 pounds; water, 6 pints; cornstarch, ½ pound. Boil 5½ pints of the water, and add to it a paste of ½ pound of cornstarch and ½ pint of water. Heat until a thick paste is formed, stirring constantly to keep from lumping. To this add the cocoa, previously sifted, and the sugar, and beat all into a smooth paste. This may be thinned either with syrup or water to suit. The contributor of this formula states that this dressing has proved to be his best seller and "always makes a regular customer."

Amphion Sauce

Shave four 5c cakes of milk chocolate in hot water and dissolve. Then take 2 cupfuls or 1¼ pounds of good cocoa and 5 cupfuls or 2½ pounds of granulated sugar, and mix them well together. Convert the mixture of cocoa and sugar into a paste with the solution of milk chocolate, using just enough water to bring the paste to the right consistency. Into the paste put 5 ounces of maple syrup or 2 ounces of maple extract and 1 teaspoonful of cinnamon. Heat, but do not boil, 24 ounces of milk and mix with the paste. Place the mixture on the fire and boil for three minutes, stirring constantly. Remove from the fire and, while still hot, strain, adding a pinch of salt. Take 25 teaspoonfuls of malted milk and dissolve it in just enough hot water to make the resulting solution easy to pour. Heat, and mix with the cocoa mixture to make a sauce. When lukewarm, add 2 ounces of vanilla extract and 3 drams of rose water to flavor.

To serve, place a No. 8 cone of vanilla ice cream on a suitable dish, cover with the "Amphion sauce" and sprinkle on some dry ground nut meats. "Costs about 6½c to make and sells easily for 15c." The author of the formula writes that he has worked up quite a large local trade for this sundae, the name for which was suggested by a well known organization in his city. (Leo Birdsong.)

Choco-Nut

Make a thick paste of powdered cocoa and hot water, and add simple syrup until the correct consistency is obtained. Stir in pecans, walnuts and almonds, chopped together, until the syrup is sufficiently thickened. Serve over vanilla ice cream in a sundae glass.

Turkey Trot

To prepare, grind together in equal proportions to make 1 pound, four kinds of nuts, viz., walnuts, pecans, almonds and filberts; pour the ground nuts into a pint of thick chocolate and a pint of marshmallow whip, and mix so as to make a pudding.

To serve, take a silver sundae cup, into it put a No. 12-to-the-quart dipperful of vanilla ice cream, then add the pudding and over it put 2 spoonfuls of whipped cream; lastly, put a green cherry on one side of the dish and a red cherry on the opposite side.

League Winner

Boil together 5 ounces of cocoa, 3 pounds of sugar, and 1 quart of water; add one 10-cent can of evaporated milk, 1½ pounds of chopped dates, ½ pounds of pistachio nuts, and 15 drops of almond extract. (This mixture is to represent a baseball field.) Mix well, and pour a ladleful over a round ball of ice cream (the baseball) in a suitable dish, and serve with 2 veronique wafers (long and round to represent bats) and a glass of water (the refreshment at the big game).

The author writes that this sundae was originally devised in honor of the local baseball club again joining the "league" of his section, and the delicacy has been a winner and steady seller from the start. (C. L. Hadley.)

Nancy Brown

Best cocoa, 8 ounces; granulated sugar, 6 pounds; water, ½ gallon. Heat the water to the boiling point, add the cocoa and sugar mixed and stir well in. Cook the mixture until it boils good, take off from the fire and add the following while the syrup is still hot: Ground assorted nuts, 3 pounds; ground cloves, 1 ounce; ground cinnamon, 1 ounce; glycerin, 3 ounces; Eagle condensed milk, 2 cans, and coffee extract, 8 ounces. The latter must be obtained fresh every time the syrup is made up by letting two quarts of boiling water drip through one pound of very finely ground Mocha and Java coffee. The water should be returned and passed through the coffee twice. Mix well together and serve this way:

Take a tall stem glass, large enough to hold a ball of vanilla ice cream (size 16). On this place in a neat manner 2 teaspoonfuls of the mixture with heavy whipped cream and top off with a piece of glace fruit on a toothpick. Serve with two nabisco chocolate wafers and a glass of water. A glass of Nancy Brown can be sold for 10c and costs about 6c. (C. L. Hadley.)

Nuco Chocolate

Chocolate, 8 ounces; sugar, 10 pounds; oil of nutmeg, 10 drops; extract of vanilla, 2 drams; finely ground mixed nuts, ½ pound. Mix the chocolate, sugar and oil of nutmeg; make a paste with 2 pints of water, then add 3 pints more of water and boil for five minutes; add the vanilla extract and mixed nuts. Serve as ordinary chocolate syrup from a chocolate pot or decanter.

Milk Chocolate Morello Cherry

Take 5 pounds of milk chocolate (cake) and melt it in a double boiler. Mix together 2 quarts of milk and 1 quart of condensed milk, boil, and then add the mixture, little by little, to the melted milk chocolate, and beat to a smooth paste. Let the mixture come to a boil, then remove from the fire and cool. Add 2 ounces of vanilla extract. This formula is for the preparation of the milk chocolate.

To prepare the Morello cherries: Take a No. 10 can of the cherries and boil the contents for 10 to 15 minutes, adding, while boiling, a little red coloring. Remove from the fire and cool. Mix equal parts of the Morello cherries and the milk chocolate in a fruit bowl and serve as follows: Take a No. 10-to-the-quart dipperful of either vanilla or chocolate ice cream, and cover with the cherry-milk chocolate mixture. Add a teaspoonful of whipped cream and place a cherry on top. Sells for 10 cents.

The author states that "the beauty of this formula is that it provides for three sundaes. The dispenser, if desired, can serve 'milk chocolate Morello sundae,' 'milk chocolate sundae,' or 'plain Morello cherry sundae.' There is nothing like it on the market ,and it is easy to make and very popular. I sell from 200 to 250 a day. I have two jars of the materials on the bar even at this time of the year." To advertise it he uses the following sign:

Milk Chocolate Morello Cherry Sundae
Never Tasted Anything Like It Before

Chocolate Temptation

To a pint of rich chocolate syrup add 1 pound of granulated sugar; bring to a boil over a slow fire, remove and add one cupful each of ground walnuts and seeded raisins.

Keep sauce hot in chafing dishes or by placing it on steam tables. The hot sauces when poured over the cream become hard and make a dainty dish. These sauces can also be used for hot maple or chocolate fudge nut sundaes, which, according to the author, are very popular in his part of the country. (Harry G. Frame.)

Chocolate Nougat

Granulated sugar, ½ pound; chocolate, ½ pound; milk, 8 ounces; lemon juice, ½ ounce; crushed pineapples, 1 can; nuts, 6 ounces. First mix the milk, chocolate and sugar together, cook over a slow fire for about five minutes, then slowly add the lemon juice and cook until the mixture comes to a boil; add the nuts and crushed pineapples, mix, and set aside to cool. To serve, place a No. 12 scoopful of chocolate ice cream on a suitable dish, cover with chocolate nougat, and top off with whipped cream and a cherry. Sells for 15 cents.

Chocolate Marshmallow Nut

Mix one cupful of powdered chocolate with 3 cupfuls of simple syrup. Let the mixture come to a boil, then beat in 2 dozen marshmallows. When about cold, add one cupful of walnuts chopped not too fine. To serve, put one scoopful of vanilla ice cream in an ordinary sundae dish and pour over the cream one ladleful of the chocolate marshmallow nut mixture. If desired, a maraschino cherry may be placed on top of the mixture to give it a more attractive appearance.

Flying Dutchman

Dutch chocolate	1 pound
Water	1 pound
Corn starch	3 ounces
Granulated sugar	7 pounds

Dissolve the chocolate in hot water, taking care not to burn it; mix the corn starch with cold water, add to the chocolate and heat over a slow fire, stirring constantly; strain through a sieve to remove coarser particles and dissolve the sugar in the strained liquid while it is still hot.

English Chocolate Nut Sundae

Rich cream, ½ gallon; granulated sugar, 4½ pounds; marshmallow whip, 4 heaping ladlefuls. Boil until this mixture has a smooth appearance; then add to it ½ pound Baker's bitter chocolate, previously grated and rubbed to a smooth paste with hot milk. Boil until the mixture reaches the desired consistency, remove from the fire, place on a cake of ice and whip until cool; then incorporate 1½ ounces of vanilla extract and enough blanched unsalted peanuts to make the mixture into a thick paste. This makes a fine sundae dressing.

To serve, place a ladleful of the paste over a No. 20-to-the-quart disherful of ice cream on a fancy dish, sprinkling over the dressing enough soluble malted milk to give a little added contrast in color. Sells for 10 cents. (W. E. Kefover.)

Chocolate Dainty

Sift together 1 cupful powdered cocoa and 1½ cupfuls of powdered sugar. Put a pint of cream over the fire and sugar and cocoa to make a paste, stirring to reduce all lumps while adding the cream; pour in the rest of the cream and cook in a double boiler for about 10 minutes. Remove from the fire and after the mixture has become cool add a few drops of vanilla extract. To serve place a No. 12 disherful of vanilla ice cream in a sundae dish and cover with the chocolate prepared as above. Top with whipped cream and a cherry. Sells for 15 cents. (Harper Huntley.)

Chocolate Fruit

Strawberry syrup, 10 ounces; vanilla syrup, 10 ounces; raspberry syrup, 8 ounces; chocolate syrup, 4 ounces. Pour a ladleful of this sauce over plain ice cream.

Dixie

Into a silver sundae dish put two scoopfuls of vanilla ice cream and add a ladleful of "Dixie Dessert Syrup." Top with whipped cream and cherry. Dixie Dessert Syrup is made as follows: Mix into a paste 1 pound of peanut butter and ½ pound of cocoa by gradually adding 3 quarts of cold water. When the mixture is rubbed up smooth, add 2 ounces of butter, and slowly heat until it boils; dissolve in it 3 pounds of sugar and set away to cool; then stir in 2 ounces of vanilla extract and the mixture is ready for use.

The author writes that by using cold water and gradually bringing the mixture of peanut butter and cocoa to a boil, the combination will thicken like gravy, and will not separate when cold. To make an adequate margin of profit on this feature it should be dispensed at 15 cents per service. (E. Dean Matteson.)

Chocolate Buffalo Sundae

Nuts ground fine...	½	pound
Crushed orange (J. H. S. & Co.'s)...	2	pounds
Claret syrup, heavy...	1	quart
Chocolate syrup, heavy	1	quart

Mix all well together, let stand for some time, and then pour a ladleful over vanilla ice cream.

This sundae was much in demand and served for a long time at a large Boston fountain. (C. L. Hadley.)

Brown Stone Front

Make a thick, smooth paste of powdered cocoa and hot water, and add simple syrup until the correct consistency is obtained. Stir in sufficient pecans, walnuts and almonds chopped together and serve over ice cream.

Hot Chocolate

Melt 1 pound of bitter cake chocolate and add to the melted liquid 1 pint of light cream; keep the mixture hot. To dispense, pour a ladleful over a dish of chocolate ice cream. Price 15 cents.

Hot Chocolate

Boil one cup each of sugar and water for five minutes. Melt half a pound of unsweetened chocolate and add to sugar. Season with one teaspoonful of extract of vanilla and half a teaspoonful of extract of cinnamon.

Hot Milk Chocolate

In a suitable dish place a No. 10 disherful of vanilla ice cream, and cover it with a ladleful of hot milk chocolate sundae sauce. Decorate with a little whipped cream and red cherry (a little of the cherry liquor will not be amiss). The hot sundae is made by shaving 2 pounds of milk chocolate (which may be bought in 5- or 10-pound cakes at 30 cents per pound). Place the chocolate in a double boiler, heat till dissolved, stirring with a wooden paddle; add a pinch of salt and 1 quart of unsweetened condensed milk. This will somewhat chill the mix, but continue the heat and stirring until the mixture is thoroughly homogeneous, then add about a pint of sweet cream or milk, scalded, but not boiled. Keep the saucer in a hot-water bath where the customer can see it. If it becomes too thick, the water in the bath is not hot enough; if gas be used under the bath it tends to make the sauce too dry; this is remedied by adding a little more milk and well stirring the mixture. The sauce so used may also be used with hot drinks. Served with whipped cream and wafers. Sells for 15 cents. (J. K. Taylor.)

Hot Milk Chocolate

Sweet milk chocolate, 1 pound; milk, 1 pint; sugar, 4 ounces. Shave the chocolate and melt in a double boiler, then add the milk very gradually and with constant stirring; when thoroughly dissolved, stir in the sugar. Place a No. 12-to-the-quart disherful of chocolate ice cream (vanilla ice cream may be used) in a sundae cup, pouring over it a ladleful of the above syrup, and top with whipped cream. Sells for 15 cents. "Can be advertised on the windows and on the menu cards."

Hot Fudge Sundae

Fountain chocolate, 1 pound; sweet milk, 8 ounces; granulated sugar, 8 ounces; butter, 4 ounces. Mix and let boil on a water bath till thick, then add 2 drams of extract of vanilla; keep warm on the water bath and serve in that condition on slices of brick ice cream cut from bricks. One or two attempts at the "fudge" in small quantities may be necessary to get the right article for serving, but the finished product, if rightly made, is a winner.

Hot Cocoa Sauce

Water	7 cups
Sugar	2 cups
Arrowroot	2 tablespoonfuls
Cocoa	2 tablespoonfuls

Boil water and sugar and add arrowroot dissolved in cold water, stir and boil till clear. Dissolve cocoa in hot water and add with pinch salt and stir and boil 3 minutes. Remove from fire and add teaspoon vanilla. (Mrs. Cornelia G. Bedford.)

Hot Cocoa

Boil together one and one-half cupfuls of water and one cupful of sugar for two minutes; add one tablespoonful of arrowroot dissolved in a little cold water, stir for a moment, then boil until clear. Add two tablespoonfuls of cocoa, which have dissolved in a little hot water, and a tiny pinch of salt, and boil for three minutes longer. Take from the fire and add one teaspoonful of vanilla extract.

Hot Chocolate Nougatine Sundae

To prepare the nougatine take 6 pounds sugar, 2 pounds corn syrup, 2 quarts water, and 3 pounds honey. Mix and boil until the mixture becomes quite thick, then remove from the fire.

In a separate kettle take the whites of 1 dozen fresh eggs and beat them until quite stiff; then add of the beaten whites, a little at a time, to the above preparation, stirring all the while, until the mixture is thoroughly incorporated. Add ½ gallon marshmallow whip, 5 pounds of pistachio nuts, 2 pounds bitter chocolate and 4 ounces vanilla, mix thoroughly together and keep warm. In serving, take silver sundae cups and place on each a No. 10-to-the-quart dipperful of vanilla ice cream, cover with chocolate nougatine, and dress with a spoonful of whipped cream. Sprinkle on a little nutmeg to suit the taste, if desired. "A delicious sundae and a good seller." Price, 15 or 20 cents.

Coffee Nuttee

Chop ½ pound of English walnuts, ½ pound hickory nuts, ¼ pound filberts and mix with the desired amount of coffee syrup. To serve pour a small quantity over a portion of ice cream and tip with whipped cream.

Cream Almond

In a mortar mash 1 pound, bring to a scald; then pour enough of the cream over the blanched almonds until reduced to a fine paste; add ½ pound of sugar and 1 quart of water, and cook for half an hour; then add 1 quart of pure cream and again cook for five minutes. Remove from the fire and when cold, add 1 ounce of vanilla extract and 10 drops of orange flower water. Pour a ladleful of almond mixture over ice cream. (Theodore Louvis.)

Butter Nut

Bring to a boil 1 pint of cream and 2 pounds of pulverized sugar; then add 6 ounces of ground mixed nuts and 8 ounces of butter. When cool, serve a ladleful of the mixture over a disherful of walnut ice cream. The dressing can also be served to good advantage over ice cream of other mixture over ice cream. Edward C. Swain.)

Walnut Fudge

One quart chopped walnut meats, 2 pounds brown sugar, 1 ounce vanilla, 2 ounces caramel, 2 quarts cream, 8 eggs, 2 quarts milk, 4 ounces butter, 4 level tablespoonfuls flour.

Make a custard of the milk, flour, sugar, butter and whole slightly beaten eggs. Add to hot custard one quart cream. Cool. Mix with this vanilla and caramel. Add nuts when mixture stiffens.

Penoche Sauce

Sugar	4 pounds
Cream	1½ quarts
Glucose	½ pound

Mix, boil 3 minutes, cure; hot, scorch, cool and stir in sufficient chopped pecans. (W. G. Turner.)

Nugget Sundae

Take ½ gallon of vanilla marshmallow 1 quart of maple syrup, 1 quart of pineapple fruit, and ¾ pound chopped pecan nut meats. Mix the marshmallow and maple syrup and incorporate the pineapple. Then mix in the chopped pecans. Color a golden brown with caramel or burnt sugar coloring. To serve, place a sufficient quantity over vanilla ice cream, topping off the sundae with whipped cream and a maraschino cherry. Can be sold at a good profit for 15 cents.

To advertise this specialty the author used a sign on the window which read:

The Richest Yet

NUGGET SUNDAE

15c

(J. L. Miller.)

Butter-Scotch

Take the yolks of five eggs, place in a granite pan, add a cupful of granulated sugar, and stir well. Then add 3 cupfuls of granulated sugar, 1 cupful of brown sugar, 1 cupful of glucose, ½ cupful of good butter, ¼ teaspoonful of salt, 1½ cupfuls of water, and 1 cupful of milk. Stir all well together, then place on the fire, continuing the heat and stirring with a small ladle until cooked.

Butter Scotch

Tablets—Cut up 1 pound of best butter, put it into a clean, bright, copper kettle and melt down, stirring constantly with a paddle, then add 6 pounds of good brown sugar. Continue to stir, and boil to "crack" degree; pour out on greased slab. When sufficiently cool, cut into tablet size. Vanilla or lemon flavoring may be added, if desired, or the candy may be left without additional flavoring.

Butter Scotch

With glucose—White sugar, 16 pounds; brown sugar, 1 pound; glucose, 5 pounds; butter, 1½ pounds; lemon flavor, enough. Put the sugar with a little water into a pan to melt, add the glucose and cook to 210°. Take off the fire, work in the flavor, and add the butter. Pour into a large pan, or on an oiled slab, to cool.

Butter Scotch Dressing

Cook to a thick syrup in a copper pan 2 pounds of brown sugar, ½ pound of glucose, and ½ pound of good butter, adding a little cream to produce the required density.

Butter Scotch Pecan Fudge

Cook over a slow fire until the mixture comes to a boil 2 pounds of sugar and 1½ pints of milk; then add ½ pound of butter, stirring until dissolved, a teaspoonful of table salt, and color a light shade with caramel; slowly pour in two teaspoonfuls of lemon juice and 3 handfuls of pecans. When cool, serve a scoopful on a cone of vanilla ice cream, and "dress" with whipped cream and a cherry. Price, 15 cents. (T. J. Beaucoudray.)

Butter Scotch

Sugar, 4 pounds; water, 15 ounces; cream of tartar, ½ dram; butter, 2 ounces. Put the water, sugar and cream of tartar into a pan and stir until boiling; do not stir after the mixture begins to boil. Add the butter after removing from the fire, but do not stir in.

Caramel Dressing

Extract of coffee...	1½	fluid drams
Extract of vanilla..	1	fluid dram
Caramel	1	fluid dram
Chocolate syrup....	8	fluid ounces
Simple syrup, enough to make	32	fluid ounces

To serve, put a sufficient quantity of the syrup in a 12-ounce glass, with or without ice cream, and fill the glass with carbonated water. The syrup can also be used for a dressing, etc. This formula is known under the title of "caramel syrup," although many variant formulas have been printed under the same name. A "caramel syrup" suitable for dressings, etc., can also be made by adding caramel directly to simple syrup, and using the product so made to flavor sauces, frosting, ice cream, etc., this being the plan followed by most operators.

Caramel

Take 1 pound of vanilla caramels, which may be obtained from any first class confectionery store, put them in a porcelain container, add 1 pint of hot water, and stir until dissolved, or put over a slow fire and heat until dissolved, being careful not to burn; remove from the fire, let stand for five minutes; then add 1 ounce of vanilla extract and 1 quart of pure cream, 20 per cent.; mix thoroughly, and keep in a glass bottle in a cool place. To serve, place a 10-to-the-quart scoopful of vanilla ice cream in a sundae dish and pour over it a ladleful of the caramel sundae mixture; sprinkle on a teaspoonful of ground pecans, and top with a Maraschino cherry. (Theodore Louvis.)

Caramel Fruit

One quart of heavy caramel syrup, 1 pint of crushed pineapple, 1 pint broken Maraschino cherries; mix well and serve in fancy stem sundae glasses, garnishing with whipped cream and a whole cherry.

Nut Caramel

Mix equal parts of pecans, English and black walnuts, pignolia and pistachio nuts. Chop together and mix with an extra heavy caramel syrup.

Caramel Nut Fudge

Take 3 pounds of granulated sugar and burn over a slow fire (do not scorch) until smooth and thoroughly dissolved; then stir in slowly 1 quart of pure rich milk, 1 pound grated English walnuts, and boil the mixture for three minutes so that the oil from the nuts will boil out and flavor the fudge; add ¼ ounce extract of vanilla and let the mixture cool. As thus prepared one has ½ gallon of rich nut fudge which is original and true to name. To dispense, use a small round "Yokomay" dish or bowl and into it, in the center, place a dipperful of ice cream, pouring over the cream a ladleful of caramel nut fudge. Top off with whipped cream, placing on the cream three walnut halves and in the center a marshmallow. (Charles Greenberg.)

Cara-Mallow

Make a good caramel syrup and mix with marshmallow paste, using 2 parts of the former to 1 part of the latter. Pour a sufficient quantity over vanilla ice cream and top off with nuts, whipped cream and a cherry. (P. H. McNulty.)

Marshmallow Salad

Peel and slice one dozen bananas and mix with marshmallow sauce (see Marshmallow Creme), add a few chopped Maraschino cherries, ½ pint of diced strawberries (not crushed) fresh, and 4 ounces of crushed pineapple. Mix well, pour the mixture over vanilla ice cream and top with nuts and a cherry.

Fruited Marshmallow

Take 1 quart of fresh strawberries, ½ pound pecan meats and 2 quarts of fresh marshmallow syrup. Sort the strawberries and cut each berry in three or four pieces Chop up the pecan meats, mix with the cut strawberries and let stand for five minutes. Incorporate the marshmallow syrup and color red, using a sufficient quantity of fruit coloring. To serve, pour a ladleful of the fruited marshmallow dressing over a dish of strawberry or peach ice cream, and top with a small spoonful of whipped cream, one cherry, and a dash of cinnamon. The author says of his Fruited Marshmallow feature: "It is a dandy seller at 20 cents." The following sign was used to advertise the specialty:

Wanted 100,000 Recruits
to try
FRUITED MARSHMALLOW
at
Blank's Soda Fountain

Mallowraipine Sundae

Take 2 pounds of seedless raisins and cook in 1 quart of simple syrup until they swell; then cool. Take 1 quart of marshmallow whip, mix down to a smooth paste with 3 ounces of distilled water, then add 18 ounces of raisins and 12 ounces of crushed pineapple. In these proportions the mixture is not sickening and is liked by most customers. To serve, take a No. 16-to-the-quart ladleful of vanilla ice cream and place it in a fancy china cup large enough to hold ice cream; top the ice cream with the mallowraipine mixture and a Maraschino cherry. Place the cup in which the sundae is served on a fancy china saucer of the same design.

The author states that the reason he works the marshmallow down with distilled water is because the product thus made does not become so "sickening sweet" when the raisins are added. The name, he explains, was suggested by the names of the principal ingredients used in making the dressing. Sells for 10 cents. (Peter Eichelman.)

Marmalade Sauce

Add half a cup of orange marmalade to one cup of marshmallow dressing. Beat smooth.

Snowball

Mix in a large bowl 1 quart marshmallow frappe, 1 quart maple syrup, ¼ pound chopped walnuts, ¼ pound chopped pecans, 3 bananas, sliced, 1 pt. grated pineapple. Marshmallow frappe can be bought ready for use at any first class soda fountain supply house, while maple syrup can be made according to the following formula: Maple sugar, 15 pounds; granulated sugar, 12 pounds; water, 2 gallons; mix and let boil for about 4 minutes. This concentrated syrup will stand dilution, using 1 gallon of the maple syrup to 2 gallons of simple syrup. The bowl in which the mixing is done should be used for displaying the mixture. To serve, put one 10-to-the-quart dipperful of ice cream on a suitable sundae dish and over it pour two ounces of the above Snowball mixture. Top with one cherry. Price, 15 cents. (James Whalen.)

Yellowmallow Sundae

Prepare a dressing composed of marshmallow, 14 ounces; lemon syrup, 1½ ounces; tincture of curcuma (turmeric), ½ ounce; chopped pecans, 2 ounces. Mix well.

Over a 10-to-the-quart disherful of ice cream pour two ladlefuls of the dressing. Insert a piece of soda straw about four inches long in the cream ,and on the tip of this stick a cherry. Sells for 10 cents.

In order to make the dish more attractive, states the author, the fountain should be trimmed in yellow. He has found that the sundae is a great repeater, and it has been a record breaker at his fountain this year. (Wm. J. Holley.)

Rose Bud

Mix thoroughly one pound of fresh marshmallows (previously cut into small pieces) with one quart of strawberry fruit and syrup, one-half pint of Maraschino cherries and enough nuts to make it palatable, bringing the mixture to the desired viscosity through the addition of claret syrup. To make the Rose Bud Sundae: In a silver service place a scoop of vanilla ice cream and one of strawberry ice cream. Cover the creams with a liberal quantity of the Rose Bud syrup and bank with whipped cream, topping off with a fresh strawberry. This mixture has sold rapidly in Louisville at 15 cents per portion. (Clarence Bess.)

Tango Sundae

Place in a sundae dish a No. 12-to-the-quart disherful of vanilla ice cream, over which pour a ladleful of "tango dressing." This dressing is made by taking one pint of marshmallow topping and one pint of simple syrup, and beating them well together until the mixture is light and smooth. Add to the mixture one pint of crushed pineapple, one-half pint of Bigarreaux cherries (Maraschino flavor), 4 ounces of chopped pecans, 2 ounces of citron, also chopped very fine, and one-half pound of marshmallows, cut in cubes. (Leslie Bauslin.)

Marshmallow Puff

Take one apple and cut it into small pieces about the size of a small finger nail; in a similar manner cut up one banana. Now make a thin paste of marshmallow whip and syrup and mix it well with the apple and banana.

Marshmallow Creme

Place a disherful of vanilla ice cream in a sundae glass and over it pour a sauce made of marshmallow whip, 2 parts; simple syrup, 1 part, and sufficient extract of vanilla to flavor. Top off with a little whipped cream and a red cherry. Place a few pieces of pink marshmallows around the edge of the sundae dish and serve with nuts or not, as desired.

Maple

Beat the whites of four eggs stiff, add one cupful of boiling hot maple syrup, and beat vigorously with a spoon. Cool and add to the mixture one cupful of cream. Whip the mixture with an egg beater, adding, if desired, chopped nuts. Price, 15 cents.

Hot Maple Delight

Run through a coarse food chopper 1 pound pecan nuts, ½ pound walnuts, ¼ pound preserved ginger and ½ pound citron, then add 1 quart strawberry fruit and 1 pint simple syrup and stir to form a heavy paste. Into a china saucer place one disherful (20-to-the-quart) vanilla ice cream and one of orange ice. Over these pour a ladleful of the paste, putting on top of the orange ice a red cherry, and on the vanilla ice cream a green cherry. Over all pour hot maple syrup, then place the saucer on a five-inch plate and serve immediately. The maple syrup can be kept hot in an urn or steam table. (Clinton Waldorf.)

Maple Nut

Chop up half pound or more of pecan meats, and mix with enough maple syrup to give the desired consistency. To serve, place a portion of ice cream in a sundae glass, pour over it a small quantity of the syrup, finishing with a sprinkling of cinnamon, whipped cream and cherry.

Down Town

Put in a double boiler half pint of pure maple syrup and bring to a boil. Add 1 box of clean, fresh strawberries and 1 chopped fresh pineapple. Stir all together and boil over slow fire for five minutes; when cool, put into a dispensing bowl. To serve, take a long parfait glass, place a No. 24-to-the-quart scoopful of strawberry ice cream in the bottom, on it pour a ladleful of the prepared mixture, then add a scoopful of pineapple sherbet, and over it another ladleful of the prepared mixture; top with whipped cream and a fresh strawberry. Sells for 20 cents. (Harry G. Frame.)

Brotherhood

One-half pound marron glace chopped fine, half gallon maple syrup, half pound grated nuts. This will make nearly two-thirds of a gallon. Mix well and pour ladleful over ice cream. Top off with whipped cream.

Sherwood Special

On a sundae dish put a No. 10-to-the-quart disherful of vanilla ice cream, and cover with a dipperful of a dressing made as follows: Marron glaces, chopped fine, half pound; grated nuts, half pound; maple syrup, half gallon. Mix well. After pouring the dressing over the ice cream, top off with whipped cream.

Maple Temptation Sauce

Crushed pineapple, very fine and heavy.....	1	quart
Maple syrup, genuine..	1	quart
Pecan nuts, cut fine..	½	pound
Marshmallow, undiluted	1	pint

Whip all together for 10 minutes. Pour ladleful over ice cream.

Maple Tantilizer

Dissolve over a slow fire in 1½ cupfuls of water 2 pounds of brown sugar; bring to a boil, remove from the fire and add to the mixture one cupful each of grated cocoanut and ground roast almonds. (Harry G. Frame.)

Maple Chop Suey

Seeded raisins	½	pound
Shredded cocoanut...	2	ounces
Green cherries	4	ounces
Red cherries	4	ounces
Sliced pineapple	4	ounces
Dates	4	ounces

Chop and mix, adding enough maple syrup to thin to the right consistency to serve, then add 3 ounces of angelica or port wine.

Maple Crystal

Maple syrup	2	pints
Honeycomb, cut in small pieces	1	ounce
Simple syrup	3	pints

Honey Whip

Strained honey	1	pound
Granulated sugar	1	pound

Cook to a boil and add the well-beaten whites of one dozen eggs. Beat for 15 minutes and add an ounce of vanilla extract. A very white, creamy whip and a great favorite.

Honey Boy

Chop together with a chopping knife ¼ pound lemon peel, ¼ pound orange peel and ¼ pound citron peel, using in each case the dried peel. Add ¼ gallon strained honey and ½ gallon simple syrup. Heat to the steaming point, remove from the fire and let stand in a cool place for forty-eight hours. When cool, add chopped pecans. To dispense, pour one ladleful of the above mixture over vanilla ice cream placed on a suitable dish. Top with whipped cream and one cherry. Price, 15 cents. (James Whalen.)

Chop Suey

Chop and mix thoroughly ½ pound of seeded raisins, ¼ pound of lychu nuts, ⅛ pound of shredded cocoanut, ⅛ pound of candied pineapple, 1 pound of mixed nuts, ⅛ pound of citron, ¼ pound of dates, and ¼ pound of figs. To serve, place a portion of ice cream in a sundae glass and cover with the mixture, adding a sprinkle of cinnamon. Price, 15 cents.

Chop Suey

Seeded raisins, ½ pound; shredded cocoanut, 2 ounces; green cherries. 4 ounces; red cherries, 4 ounces; sliced pineapple, 4 ounces; dates, 4 ounces. Chop and mix; add maple and cherry syrup, equal parts, to thin enough to serve; port and sherry wine, of each, enough to flavor. Price, 15 cents.

Democratic

One-half pound grated walnuts, 2 pounds grated orange, claret syrup enough to make half gallon. Fill sundae glass two-thirds full of ice cream and pour 1 ladleful of the nut mixture.

Devil's Food

Run through a food chopper 4 ounces (by measure) of roasted almonds, 4 ounces of crushed cherries, 4 ounces of crushed pineapple, 5 whole figs and 1 drop of oil of rose (or sufficient extract of rose) to impart a delicate flavor. Then mix thoroughly with one pint of cherry syrup. To serve, take one 10-to-the-quart disherful of chocolate ice cream, place it in a sundae dish and over it pour a ladleful of the "devil's food" mixture, place whipped cream around the edge of the dish and top with pecan nut meats or a maraschino cherry. Sells for 15 cents. (Guy C. Malone.)

Fig Nut

Put into a pan one quart of good marshmallow sundae syrup and color pink with a few drops of liquid cochineal. Add 6 or 8 ounces of ground nuts and mix well; then add 4 ounces of figs previously cut fine and again mix all well together.

Hot Chop Suey

Crush and thoroughly mix: Walnuts, ½ pound; pecan nuts, ½ pound; filberts, ½ pound; figs, ½ pound; dates, ½ pound. Add water, 1 quart and sugar, 2½ pounds, and marshmallow whip, ¼ pound. Keep the mixture warm and serve in the following way: Ice cream, 1 dipperful; chop suey, 1 ladleful; top off with whipped cream and a dash of nutmeg. To be served in a silver sundae cup on a fancy plate and napkin. Price, 15 or 20 cents.

Syrian

Figs	1½	pounds
Sugar	4	pounds
Water	½	gallon

Chop figs small, adding sugar and water, and boil briskly, stirring for 5 minutes.

Pudding Dressing

The pudding dressing is made as follows: Mold a pint of plain gelatin and after allowing it to become cool, crush and mix it with one-fourth crushed raisins, a similar quantity of seeded raisins, and one pint of marshmallow whip. Mix thoroughly, when the pudding should be ready to serve. A sundae can also be made by using the pudding dressing alone with the ice cream, the delicacy being thus served as "Xmas Pudding Sundae." When dispensed in this way, the author of the formula gets 10 cents. For the "Xmas Sundae Dinner" he gets 20 cents. (Chas. Held.)

Irish Stew

Take one pound of raisin cake finely broken, ½ pound of English walnuts finely chopped, one pint of mallocreme caramel and one pint of simple syrup. Mix the mallocreme caramel with one quart of hot water (this quantity of water may be a little too much—add slowly, until a sufficient amount has been used), and while stirring add the cake and nuts. Bring to a boil, and add one pint of syrup. Remove from direct fire, but keep hot. This delicacy is served as follows: Into a silver sundae dish place one 12-to-the-quart dipperful of vanilla ice cream; pour over this the "Irish stew," add whipped cream, and top off with one green cherry. Sells for 10 cents.

The author states that as an advertising medium he uses a paper strip 18x8 inches on the front window of his store; on the strip is painted a green shamrock under which, excepting the word "hot," which is in red, appears in green letters the legend:

OUR LATEST HOT IRISH STEW

Served With Whipped Cream

10 Cents

MAIDEN BLUSH

One cupful of golden brown sugar, 8 ounces of apple cider, 2 ounces of good vinegar, a couple of bay leaves, 15 or 20 whole cloves, ½ dozen whole allspice, 2 small sticks of cinnamon and a splinter or band of mace. Put into a saucepan and bring to a boil. Pare and core eight medium size maiden blush apples, quarter, add the pieces to the syrup and simmer gently until tender.

Serve on a small decorated china plate by placing a disherful of cream in the center and arranging around the cone quarters of an orange and cover with the same amount of dressing that you would use on any sundae. Top with whipped cream and two whole red cherries. (Fay W. Fraker.)

ORIENTAL

Equal parts of seedless raisins, currants and English walnuts.

NUT KRINKLE

Cut 2 pounds of assorted glace fruits into small pieces and put them into 2 quarts of simple syrup colored a bright red; boil till the pieces no longer stick to each other and then remove from the fire. To the mixture add half pound of shelled almonds, 1 pound of shelled pecans, previously ground very fine, and 4 ounces of concentrated wild cherry syrup. If the mixture is too thick, dilute with syrup.

To serve, place a round ball of perfectly white vanilla ice cream on a suitable dish and pour over it some of the above dressing; then add a good dab of stiff whipped cream (flavored with pistachio and colored a pretty green), and a red cherry on the stem, the latter being placed in the centre on the top. Serve with snow or vanilla nabiscos.

PAWPAW

Take one-half pound of roasted almonds and one-half pound of pecans and pass them through a meat chopper until reduced to very fine pieces; mix well. Then take 4 pounds of sugar and 1 quart of water and make a syrup, stirring until the sugar is completely dissolved; strain through cheesecloth, and to the strained liquid add three ounces of best vanilla extract. Keep the syrup thus made in a dispensing bottle, well-corked, in a cool place. To serve take a 6-inch dish and place on it a No. 20-to-the-quart scoopful each of chocolate, vanilla and strawberry ice cream. Over the cream pour a ladleful of vanilla syrup made as above, and sprinkle on two teaspoonfuls of the mixed nuts. Place four fresh ripe strawberries around the base. Sells for 20 cents. (Theo. Louvis.)

RAISIN

Seeded raisins	1½	pounds
Simple syrup	3	quarts

Wash raisins and boil, then add:

Lemon extract	8	drops
Caramel color		sufficient

Boil 10 minutes more, cool, and serve.

PRUNE SOUFFLE

Prunes	¾	pound
Simple syrup	1	gallon
Lemon rind	1	

Chop and seed prunes and cut lemon rind in small cubes; add to syrup and boil 10 minutes, stirring well. Cool and serve.

PEANUT DOPE

Peanut butter, 4 ounces (finely ground peanuts can be used also). Salt, just a pinch; powdered gum acacia, ¼ ounce; water, 1 ounce; syrup, ½ gallon. Rub the peanut butter, salt and acacia together in a mortar, add all of water; beat up. Then add small lump of ice cream with syrup poured over. In this formula it may prove advantageous to increase the amount of peanut butter to as much as 12 ounces.

PISTACHIO DRESSING FOR SUNDAES

(P. A. C.)—We know of no standard formula for pistachio sauce or dressing made directly from pistachio nuts, although such a combination might be easily made. One method of using pistachio nuts in connection with sundaes is to sift the finely chopped nuts on a dressing made with whipped cream or one of the marshmallow dressings now so extensively employed.

Or, take one pound of pistachio nuts, shell and drop them into boiling water for a minute or until the skin can be rubbed off easily, which should be completed after they are dropped into cold water. Dry the blanched nuts on a towel, and pound them in a mortar with a few drops of rose water, a cupful of sugar, and a cupful of cream, to make a fine, smooth paste. This may be colored a pale green with spinach or other coloring. The paste thus made can be worked up as the basis of the dressing, using, if desired, one of the commercial marshmallow creams instead of the sweet cream previously suggested.

Another suggestion is to make a flavoring extract directly from pistachio nuts and use it to flavor any desired dressing you may have in mind. Here is a formula:

Crushed pistachio nuts	4 ounces
Bruised cinnamon	60 grains
Bruised cloves	60 grains
Lemon peel	a few slices
Diluted alcohol	16 fluid ounces

Macerate for seven days, agitating occasionally, and filter. As stated above, use a sufficient quantity of this extract to flavor the dressing; the quantity necessary will have to be determined by experiment. With these suggestions you should have no great difficulty in hitting upon a satisfactory dressing possessing the pistachio flavor.

STRAWBERRY

Boil together for 10 minutes ¾ cupful of sugar and ½ cupful of water. Rub through a vegetable press a pint of strawberries and when the syrup is cool add the strawberry pulp and a teaspoonful of vanilla. Serve over ice cream for a sundae.

CRUSHED STRAWBERRY

Select ripe strawberries, stemmed and washed, 1 quart; powdered sugar, 1½ pounds. Put in a glass bowl and stir well together. If the fruit is fully ripe, a heavy syrup will soon form on the top of which the berries will float. In ladling out, dip the ladle into the syrup and draw up through the fruit. Half an ounce to an ounce of this syrup as a "topping" to ice cream soda is sufficient.

HOT STRAWBERRY

Over a service of vanilla ice cream pour a ladleful of hot crushed strawberries. Do not let the crushed fruit reach a boiling degree as the heat will tend to destroy the flavor.

STRAWBERRY SAUCE

This is used on sundaes and specials. Dissolve one tablespoonful of granulated gelatin in half a cup of cold water. Heat a pint of plain syrup hot and add to gelatin. Cool and combine with a quart of crushed sweetened strawberries. Set in cool place until the mixture is partly set. It is now right to serve and should be kept at ordinary temperature to retain its soft, jelly-like consistency.

RASPBERRY FOAM

Separate the yolks from the whites of eight eggs; beat the yolks very lightly, add 2 cupfuls of sugar, the grated rind of 1 lemon and the juice of half a lemon; put into a double boiler and boil until a thick mixture is produced; then add 6 ounces of concentrated black raspberry syrup and a little color. Beat up the whites of the eggs, add to the mixture and whip until very light. To serve, take a No. 12 disherful of ice cream in a sundae dish and over it pour a ladleful of the raspberry foam, and top off with whipped cream and a whole cherry.

LEMON FOAM

Take the yolks of 6 fresh eggs, the grated rind of 1 lemon, the juice of 2 lemons, and 1½ cupfuls of sugar. Mix thoroughly, place on a water bath and boil until the mixture thickens, stirring constantly, and allow to cool. In a separate dish beat the whites of the six eggs, mix with preceding and set in a dish on ice.

To serve: Put ice cream in the dish in the usual manner, spread over it a disherful of the "lemon foam," add some chopped nuts and top off with a cherry. (Leonard J. Finkle.)

ORANGE COCOANUT

Remove the skin from 12 large, juicy navel oranges, and chop the fruit fine in a chopping bowl; add 2 ounces of port wine and enough simple syrup to make half gallon. Beat up the whites of three eggs, add to the mixture, put all in a double boiler, add 2¼ pounds of granulated sugar and boil until of the consistency of heavy syrup. Remove the mixture from the fire, and when cool, beat in half pound of "feathered" cocoanut. To serve, place a cone of vanilla ice cream in an individual custard pot, pour over the cream a ladleful of the orange cocoanut, cover with whipped cream and decorate with a red and green cherry. Can be sold for 15 cents at a good profit. (Harry T. Frame.)

CRUSHED PINEAPPLE

Select pineapple, fully ripe, 1 pound; powdered sugar, 1 pound. Pare the fruit and slice it crosswise ½ inch thick. Cut and slice it crosswise ¼ inch thick. Cut these in a glass bowl, add the sugar and stir well together. Use with ice cream soda.

PINEAPPLE PIPPIN

Grated pineapple	1½	pints
Granulated sugar	2	pounds
Whites of eggs	8	

Cook pineapple and sugar and add whipped egg whites, stirring well for 10 minutes.

CHERRY SUZY

Crushed cherries	
Crushed pineapple	
Crushed strawberry	
Chopped pecans, and	
Chopped walnuts, of each	1 pint
Tame cherry syrup	2 pints

Price, 15 cents.

CHERRY-ALMOND

Roasted almonds, 1 pound; whole cherries, 8 ounces. Grind or chop quite fine, then add simple syrup, 1 quart. Boil for 10 minutes; when cold add simple syrup, to make 1 gallon; almond extract, 5 drops; rose extract, 3 drops. Mix and stir thoroughly.

CHERRY TRILBY

Mix together crushed cherries, English walnuts, raisins, sliced oranges cut fine. Put the mixture in a fruit bowl as is done with other crushed fruits. To dispense, put 2 scoopfuls of ice cream in a salad dish, over it put the above mixed fruit, and top off with whipped cream and maraschino cherries. Price, 15 cents. (Robert Vonderheid.)

GRAPE PUREE

Pare about a dozen large sour apples and stew them in water until they become thick. Sweeten to taste and add a small quantity of nutmeg. Then into a half-gallon fruit jar put 1 pint of grape juice and fill remainder of the jar with the apple sauce. Let the mixture stand for two days to allow the grape color to work through the sauce. Serve one ladleful of the puree on two small scoopfuls of vanilla ice cream. Sells for 10 cents. (E. Dean Matteson.)

GRAPE AND NUT

Boil two cups of sugar in one of water four minutes. Cool and add half a cup of grape juice, one cup of chopped sultana raisins, one cup chopped walnut meats and one cup of whipped cream. Price, 15 cents.

GRAPE PUFF

One quart fresh cream, whites of 4 eggs, one glass of grape juice, two small cups powdered sugar. Whip half the sugar with the cream, the balance with the eggs. Mix well. Add grape juice and pour over sweetened strawberries, pineapples, oranges or bananas. Serve ice cold.

APRICOT

Select large, fine apricots of a good color, wash them in fresh water and drain on a sieve, or better, on a napkin. Arrange the fruit in the jar, so as to make it hold the largest number of pieces without crowding. Fill the jars with white cold syrup, fasten the cover down, put in a water bath and boil for three minutes.

FRUIT FUDGE

Take equal parts of fresh bananas, peaches, walnuts and nabisco wafers and put them through the finest cut of a Universal food chopper. This, with a little grape juice added, makes a fine dressing for sundaes when served with whipped cream and a maraschino cherry on top. (Miss Winifred Lambert.)

TUTTI FRUTTI

Candied cherries, 1 pound; candied pineapple, 1 pound; granulated sugar, 1 pound; maraschino syrup, 1 pint. Chop the fruit fine, mix all together, add sufficient red coloring and let the mixture stand 24 hours; then thin with plain syrup. (P. A. McCole.)

FRENCH TUTTI FRUTTI

Into a pan put one box of French glaced fruit mixture and fill the pan with boiling water. Let the mixture stand for 10 minutes, drain the water off, and remove the pits from any of the fruit which may happen to contain them. Then chop the fruit, but not too fine (the fruit may be cut with a knife, if desired). Now add one pint of strawberry syrup and one and a half pints of simple syrup, and the mixture is ready to serve. To prepare the sundae, put two 16-to-the-quart disherfuls of vanilla ice cream on a fancy plate or side dish, and over them pour a sufficient quantity of the fruit dressing; sprinkle on some chopped burnt almonds, and decorate with a cherry. Sells for 25 cents. (Norman E. Latta.)

FRUITTI NUTTO

Chop 1 pound of mixed nuts and add 10 ounces crushed strawberry and 10 ounces crushed pineapple sauce. Pour over plain ice cream.

SAMPLER SUNDAE

Take one-half dozen bananas and one grape fruit; cut into small pieces, then add half pint of crushed pineapple fruit and one quart of crushed strawberries. Mix well and flavor with one pint of simple syrup and half pint of bisque flavor. To serve, place a No. 10-to-the-quart dipperful of strawberry ice cream in a cake cup, cover with a ladleful of the fruit dressing, and top with a cherry. Sells for 15 cents. (Walter S. Bachman.)

ROYAL FLUFF

White of 5 eggs; sugar, 1 pound; whipped cream, 1 quart; maraschino, 2 wineglassfuls. Into a pan, with a little water to dissolve it, put the sugar and bring it to the boiling point. Meanwhile, whip the white of eggs to a froth. If the sugar is already boiling, take it off and cover with a damp cloth, or sprinkle a little sugar on it to prevent a crust forming and subsequent crystallization. The froth being stiff, pour it into the syrup gradually, stirring with a paddle the meanwhile and until it is cool. The cooling operation may be hastened by setting the vessel on ice. Sweeten two quarts of whipped cream with two pounds of sugar, stirring it to keep from falling to the bottom and add to the mixture previously made; then add the Maraschino. Price, 15 cents.

EASTER

Add to 1 pint of marshmallow cream, 8 ounces each of vanilla syrup and chocolate syrup. Take ¼ pound of hazel nuts, bleach them in hot water, chop fine and add to the mixture. Then add 1 quart of fresh strawberries, previously prepared with sugar as is done in serving strawberry sundaes. Serve sufficient of the mixture over vanilla cream and top with violet whipped cream and a cherry.

The author states that in his experience this sundae is a good "leader" for making money; it catches the eye, and has a taste like that found in good bon bon candies. The whipped cream can be colored with a little concentrated violet syrup to give it the Easter color. After Easter the mixture can be called "Bon Bon Sundae," using plain whipped cream instead of violet. "The sundae sells for 15 cents and the mixture costs only 27 cents a quart, or less than any fruit sundae on the market." (John Fox.)

BRYAN'S FAVORITE

Take a basket of crabapples, peel and core and then crush them to make about two quarts. Add five pounds of sugar and one quart of water and let it come to a boil. Then let the mixture cool and add one-half quart of grape juice. To serve, place in a silver sundae cup two dipperfuls of vanilla ice cream, cover with the crabapple and grape juice mixture, and top with whipped cream.

KATRINA

Scrape out a ripe cantaloupe and run the pulp through a colander. Add an equal amount of crushed pineapple, and one-fourth as much raspberry fruit as pineapple. Stir in one tablespoonful of lemon juice to each pint of the mixture and add nutmeg and sugar to taste. (F. F. Varney.)

NOUGAT FRAPPE

Nougat frappe dressing is prepared as follows: Vanilla marshmallow, 1 quart; chopped pecans, ½ pound; crushed cherries, ½ pint; simple syrup, ¾ quart. Heat slightly so as to mix thoroughly, and keep on ice. (C. Lawson Hughes.)

GIBSON GIRL

Peel, split and slice 2 bananas, and peel, halve, quarter and slice 2 oranges; cut into quarters whole cherries, about 6 ounces. Place these fruits thus prepared, with about 4 ounces of cherry juice, in a fruit or punch bowl and add sufficient syrup to cover. Stir and let the mixture stand for about six hours.

In a sundae dish place a ladleful of vanilla ice cream and over it 1 ounce of crushed pineapple. Over this pour a ladleful of the "Gibson Girl" mixture. "A very luscious sundae." Can be served for 10 cents. (Will Rollins.)

WALDORF-ASTORIA

Put a small dipperful of chocolate cream in a sundae dish and over the ice cream put a ladleful of crushed fruit syrup; over the syrup put a ladleful of whipped cream and top with broken pecan or hickory nut meats.

The syrup is made by cutting up fine one orange, a small bunch of Malaga grapes, a few Maraschino cherries and a little crushed pineapple. Mix all together, add enough simple syrup to produce a mixture of about the same density as that of ordinary crushed fruit syrup, and enough of the juice from the Maraschino cherries to give the mixture the desired color; the syrup is then ready to serve. A fruit bowl filled with this mixture and placed on the service corner at the fountain, according to the author, "looks inviting and catches many an order for itself." The author also says that the name, "Waldorf Sundae" is suggested by the resemblance of the mixture to the well known "Waldorf Salad." It can be sold at a fair profit for 10 cents per dish. (Miss Lillian Woods.)

JACK FROST

Boil together for nearly an hour 1 pound of pineapple, 1 pound of cranberries and 2 pounds of sugar, using similar proportions if a larger quantity of the mixture is wanted. Then take a No. 10 dipperful of vanilla ice cream, place in a suitable dish, cover with the above fruit mixture, and top with shredded cocoanut and whipped cream. Sells for 15 cents and costs about 6 cents to make. (E. Rowe.)

MT. VERNON

Granulated sugar....... 2 pounds

Dissolve in sufficient water and boil.

In another kettle beat whites of one dozen eggs and slowly add to cooked syrup. Stir vigorously and add 1½ pints of chopped Maraschino cherries and color delicate pink. Makes a capital Washington's Birthday special.

FRUITED ICE

Place a cone of lemon sherbet (No. 12 disher) in a glass sundae dish and over it pour a ladleful of the following prepared fruit: The pulp of one orange cut very fine, one cupful ripe strawberries crushed, one-half cupful of shredded pineapple, six Maraschino cherries, cut in small pieces, with a little of the juice; one banana cut in small pieces; sweeten to taste and stir until every particle of sugar is dissolved. Do not make too sweet. Pack the dish containing the prepared fruit in ice and keep very cold.

The author states that when unable to obtain strawberries she uses more orange and pineapple, and a little grape juice, "but there is nothing quite so delicious as the mixture with strawberries." (Mrs. L. L. Phillips.)

GARDEN SASS SUNDAE

Cook two pounds of cut and peeled rhubarb (garden "sass") with two pounds of sugar, without adding any extra water. Cut red ripe strawberries into small pieces, or use preserved strawberries slightly acid with fruit acid, and add two pounds to the cooked rhubarb. Then stir in half a pound of broken pecans, and half a pound of marshmallow. Dilute for service with heavy syrup. A fine grade of vanilla ice cream should be used for the cream portion of the sundae.

The author says this combination of two acid fruits is a new one, and the delightful flavor produced was a big surprise. (C. L. Hadley.)

FRUITY

Over two quarts of ripe strawberries sprinkle two pounds of sugar, and allow the mixture to remain over night. Next day mash through a sieve, flavor with one ounce of vanilla extract, and add one pint of pure cream. Mix well and keep in a very cold place. To serve, place a 10-to-the-quart scoopful of vanilla ice cream in a sundae dish, and pour over it a ladleful of the above mixture; top off with a whole strawberry. The author states that the Fruity feature is "A good seller at 15 cents. (Theo. Louvis.)

HELEN OF TROY

Peel 6 oranges, cut up in blocks; 1 grated cocoanut; 12 ounces crushed pineapple. Mix well; serve over ice cream.

FROZEN PUDDING

Grind up in chopping machine one box raisins, two pints crushed pineapple fruit, two pints crushed Maraschino cherries. Cut two whole oranges into cubes and add to mixture. Then add two ounces of rum flavor and mix thoroughly. Put into an ordinary double boiler and steam for about two hours. When cold add simple syrup sufficient to make amount required. Set away in hardening room or in salt brine for several hours. This mixture is served either plain or with any of several of the most called for flavors of ice cream. Served as a sundae dressing with whipped cream it should cost 15 cents. (Fireman's Pharmacy, Newark, N. J.)

SPRING PHANTASY

To each quart of new whipped cream add 3 ounces either of crystalized violet or rose leaves, coloring it if desired, but using dye sparingly as a very delicate shade is desired.

PALM BEACH

Into a porcelain container put 9 ounces of chopped pineapple, 9 ounces of chopped cherries, 9 ounces of crushed peaches, 9 ounces of crushed raspberries, 9 ounces of crushed or sliced oranges, 24 ounces of chopped assorted nuts, 8 ounces of grape juice; mix thoroughly and let stand for a few days. Serve in the usual manner, pouring a small quantity over a dish of ice cream. Don't let stand too long; keep covered on ice. Price, 15 cents.

AMERICAN GIRL

Take 6 ounces of walnuts, 6 ounces of crushed pineapple, and 6 ounces of nice cherries, sliced in quarters; split and slice 4 large bananas and quarter and slice two Florida oranges; place all in a fruit jar and cover with pineapple syrup. To dispense, place a ladleful of this mixture over a disherful of vanilla ice cream and serve on a suitable plate. The mixture of nuts and fruit should not be made in quantities too large for the day's service, as it is liable to spoil. Can be sold for 15 cents. (John A. Lassiter.)

BELLE ISLE

Mix 10 ounces of strawberry syrup, 10 ounces of vanilla syrup, 8 ounces of raspberry syrup, and 4 ounces of chocolate syrup. Pour a ladleful of this syrup over plain ice cream in a sundae glass.

MISSISSIPPI MIX

Mix crushed blackberries with grated black walnuts. Pour over ice cream and top off with whipped cream and one Maraschino cherry. Serve in sundae cup. Price, 15 cents.

CELESTIAL

Two pounds English walnuts, 2 pounds pecans chopped together with half pound of powdered sugar; add sufficient simple syrup and fruit syrup to flavor.

BASE BALL DOPE

Into a tall stem glass (6-ounce) pour half a ladleful of "base ball dope," add a scoopful (16-to-the-quart) of strawberry ice cream, another half ladleful of base ball dope, four thin slices of banana, and a few pecans; level off the top with whipped cream, and decorate with a green cherry. The "base ball dope" is made as follows: Cover 2 quarts of fresh strawberries with 1 pound of sugar and let the mixture stand for 3 or 4 hours; then mash and add 1 pint of simple syrup.

The author states that he uses all kinds and shapes of dishes—china, silver, glass, etc.—but he prefers "the tall stem glasses for sundaes, as these show up better and do not permit the sundae to spill over the sides as sometimes happens when oblong dishes are used. Often I have noticed that a waiter going down the aisle with a tray of sundaes in tall stem glasses is stopped on his way back and asked what he just served, 'they looked so good we just wondered what they were.'" He further states that he has a neatly printed menu, and every week he invents a new dish. These delicacies are introduced to his patrons by means of a handwritten slip, bearing the name of the beverage, and the slips are fastened to the top of the regular menu with a clip. This attracts attention and sells many dishes, as it creates the impression the drink is new, and that is why many people always want it. (Pendel Poledor.)

LIBERTY BELL

Peel four large apples, grating three and chopping one; add 4 ounces of pineapple syrup and 1 pint of whipped cream, then mix; now take 5 bananas, slice into small pieces; also take 1 quart of fresh strawberries, crush, sugar well, and let stand for 2 hours to acquire a nice, sweet taste. Incorporate the three mixtures together. This makes a delicious dressing. To serve, take a Colonial saucer and egg cup, one that comes narrow at bottom and tapers outward; then take a chocolate straw, cut in two and push one-half into a Maraschino cherry, and stand erect in the egg cup, into which put a well-filled No. 10-to-the-quart vanilla ice cream; flatten out the cream in the cup so that it will resemble the shape of a bell; pour the dressing as above made over the ice cream, then place the other half of the chocolate straw on the sundae to represent the crack in the bell. Top off with a cherry. (Peter Eichelman.)

WALDORF-ASTORIA

Mix a quart of crushed ripe strawberries with 1 pineapple, previously cut into cubes. Mix thoroughly with as much sugar as the fruit will absorb. Now add an equal quantity of ripe cherries or other fruit, and a quart of chopped pecan and pignolia nut meats. Add enough strawberry syrup to bring the mixture to the right consistency and use to pour over ice cream in the preparation of sundaes. Price, 15 cents.

BAR HARBOR

Peel and cut a pineapple into cubes and cover them with sugar. In another vessel crush a quart of ripe strawberries, add as much sugar as the juice will absorb, mix with the pineapple, and add any other suitable crushed fruits and some chopped walnut meats, with enough syrup to allow the mixture to be readily served. Place a quantity on ice cream and serve as any other sundae.

SWASTIKA

Slice 3 bananas, allowing the pieces to drop into a fruit bowl; add half a pint of crushed cherries, 2 ounces of shredded cocoanut and simple syrup q.s. Use one ladleful to each sundae. Sells for 15 cents. (W. R. Sampson.)

ICE CREAM ORANGE SUNDAE

Prepare half a gallon of fruit preserves as follows: Mix one pint of crushed strawberries, one pint of crushed or grated pineapple, four crushed bananas, and sufficient orange, raspberry and strawberry syrup to make up the batch to two quarts. Place all in a shallow preserving kettle and cook to the consistency of preserves, adding several pieces of orange peel. Allow to cool, and serve two ladlefuls or 10 teaspoonfuls of this preserves over an ice-cream orange.

STRAWNUPINO

Chop 1 pound of mixed nuts and add 10 ounces of crushed strawberry and 10 ounces of crushed pineapple sauce. Pour over plain ice cream.

FRUIT BON BON

Whole cherries, 5 dozen; black raspberry fruit, 1 pint; pecan halves, 3 ounces; English walnuts, 3 ounces; sherry wine, 10 ounces; simple syrup, 1 pint. Grind the cherries, raspberries and walnuts together, add the simple syrup and sherry wine, and then stir in the pecans broken into pieces. Serve in a tall glass with nabisco wafers and a glass of water. Put into the glass a small portion of pineapple and orange ices, and ice cream, cover with the salad and top off with whipped cream and a whole cherry. Price, 15 cents. (Guy E. ClaVell.)

FRUIT SALAD

In a suitable footed-sundae dish place one twelve-to-the-quart disherful of vanilla ice cream; over this pour a ladleful of fruit salad; take two nice large oranges, peel and chop them into cubes; split two bananas into quarters lengthwise; slice one-half pint of cherries into quarters; one-half pint of shredded cocoanut; mix the fruit thus prepared with cherry syrup, sprinkle well with sugar and let stand an hour before serving. (Warren Thomas.)

ICE CREAM AND WATER ICES

What has been jocularly called "the solidification of the soda fountain business" is one of the most significant developments of recent years. The growth in the popularity of all sundaes and fancy desserts and more recently the addition of the luncheonette to many fountains have a most marked effect on the character of the materials employed at the fountain. A natural part of this movement has been a tremendous increase in the quantity of frozen products used at the fountains, and as a natural consequence the great increase in the number of fountains that are now making their own ice creams and water ices.

This tendency to serve ice creams of their own making has been fostered by the many improvements in the various types of freezers. Refinements in the ever-popular tub-and-ice style of freezer make these now easier to handle and have improved their freezing quality. The brine freezers, both of the perpendicular and horizontal type, have been markedly improved in recent years, and they have been made in smaller models than was at first thought practical.

These mechanical improvements have lowered the cost of ice cream making, and many fountains have found that it is possible for them to make a better cream at less cost and with very little additional trouble than it was possible for them to buy.

When a fountain is making its own cream, the pushing of various frozen specialties has often proved to be a very popular and profitable feature. Curiously, the sale of sundaes at the fountain is greater during the winter than in the hottest months of summer, and the sale of fancy ice creams to family trade during the social season has been highly developed by many fountain operators. In the torrid season, the sale of water ices, sherbets, and frozen punches can be most advantageously pushed. These all show a splendid profit, and the fountain that makes its own ice cream and does not add ices and sherbets to its menu is neglecting an opportunity.

As in every other department of the successful soda fountain a sure foundation of quality materials is the safest guarantee of success. The freshest of fresh fruits only should be used. When extracts are employed for flavoring these should be of the highest quality. Care should be taken to freeze the mix properly and to store and pack the frozen products skilfully. But the very foundation of good ice cream is good cream, and the ice cream maker should satisfy himself that his cream is right.

Testing Cream

A number of methods of testing cream have been devised, one of the simplest being described in Circular No. 42 of the Purdue University Experiment Station, the apparatus required being a number of sample tubes or jars, a balance or scales, cream-test bottles, an acid dipper, and a Babcock centrifuge. Samples of fresh cream of normal richness, and which is not perceptibly separated, can be tested accurately without special preparation, other than mixing thoroughly by shaking or pouring before use. Thick and semisolid samples which are otherwise in good condition should be warmed to about 90° F., then poured gently and weighed at once. Cream samples in which the butter fat is completely separated and churned, or has formed a compact, tough and leathery layer, as is the case with old samples not stored at a low temperature, should be heated high enough to melt the butter fat, 110° F. or above, then shaken thoroughly and weighed out at once. It should be understood that samples in this condition are at best difficult to handle and tend strongly toward inaccurate results.

The cream must be weighed into the test bottle, not measured. This is necessary in order to secure the correct amount by weight. Cream varies in weight with its richness and its mechanical condition, and no one measure will hold the correct amount of cream of varying richness. The correct unit of weight to take is nine grams, which is weighed on a suitable balance or scales, in a standard 9-gram 50 per cent. cream test bottle, the stem of which is marked with divisions representing 0.5, 1, and 5 per cent. To the cream in the test bottle, add commercial sulphuric acid, sp. gr. 1.82 to 1.83, until, when properly shaken and all the white curd has disappeared, the mixture has a coffee-brown color. A light brown color shows that more acid is needed. A black color immediately after shaking indicates too much acid. When adding the acid, the bottle should be held in an inclined position and should be revolved once. In this way the acid washes the neck free from particles of cream and curd. After the acid is added the bottle should be shaken carefully by giving it a rotary motion. Care should be taken not to spill any of the contents. In case of spilling the test should be rejected and made over. The bottle is now ready for the Babcock centrifuge in which it is whirled at the proper speed, 1000 revolutions per minute for a tester with a 12-inch diameter wheel and 800 revolutions per minute for a tester with an 18-inch diameter wheel. Fill to the bottom of the neck of the bottle with hot, soft water, whirl for two minutes; fill to about the 45 per cent. mark with hot, soft water, and whirl for one minute. The temperature of the water added should be not less than 140° F., and preferably near that of boiling water. Remove the bottle from the tester to a water bath, where it should remain at about 135 to 140° F. for 10 minutes. Just before reading the test and when taking the bottle from the water bath, add a few drops of glymol (white mineral oil), which removes the meniscus or curve on top of the fat column, leaving a straight line which is sharply defined, and readily seen. All that now remains to be done is to read the percent. of fat from the graduations on the outside of the tube corresponding to height of the column of fat within. With the average percentage of a representative sample known, the amount of butter fat in any number of gallons of cream may be readily ascertained by weighing the entire quantity, the factor found being the proportion in pounds of butter fat present.

This matter of the determination of the percentage of butter fat in cream is important to the maker of ice creams for most of the States have adopted certain legal standards with a minimum of butter fat allowed by law in ice creams of various types. The local boards of health, the State and National authorities are all active in the enforcement of these regulations, and it is well that those who are manufacturing ice creams should post themselves on the legal requirements:

STATE STANDARDS FOR ICE CREAM

There are several things to be remembered by ice-cream manufacturers and retailers who deal in manufactured cream: (1) Ice cream shipped to a State other than that in which it is made comes under Federal jurisdiction; (2) ice cream sold in the State in which it is made comes under the State and city jurisdiction—State laws and city ordinances or regulations of the local boards of health; (3) in States where no laws exist there are instances where rigid local regulations govern the manufacture and sale of this product. Hence, it behooves a manufacturer of ice cream to investigate thoroughly the regulations, local or State, under which his business will be conducted.

In Circular 19 of Standards (U. S.), the following definitions, or standards, are thus given:

1. *Ice cream is a frozen product made from cream and sugar, with or without a natural flavoring, and contains not less than 14 per cent. of milk (butter) fat.*
2. *Fruit ice cream is a frozen product made from cream, sugar and sound, clean, mature fruits, and contains not less than 12 per cent. milk (butter) fat.*
3. *Nut ice cream is a frozen product made from cream, sugar and sound non-rancid nuts, and contains not less than 12 per cent. of milk (butter) fat.*

These standards—14 per cent. for ice cream, and 12 per cent. each for both fruit and nut ice cream—have been indorsed by many of the States having ice-cream regulations. In other States—Maryland for example—a higher percentage of fat is required in nut ice cream than in plain ice cream; in still other States, milk and cream, condensed milk, and a pure vegetable "filler" are allowable under the law. The following table of legal requirements is made up from a digest of the recent legislation on this subject. Where no changes in standard have been reported, the standard heretofore published is stated:

State Butter Fat Regulations

Alabama—14, 12, 12 per cent. Local regulations authorized by State enactment.

Arkansas—No State standard.

Arizona—14, 12, 12 per cent.

California—12, 10, 10 per cent.; allows six-tenths of 1 per cent. of "harmless vegetable gum" as a filler; all frozen products containing less than required butter-fat content termed "ice milk."

Colorado—No State standard. A regulation sets percentage of fat at "not less than 14"; fruit and nut ice cream "not less than 12 per cent."; eggs and gelatin allowable.

Connecticut—No State standard.

Delaware—No legal standard. Unauthorized ruling, 14 per cent.

Florida—12 per cent. standard.

Georgia—14, 12, 12.

Idaho—14, 12, 12.

Illinois—Statute authorizes regulation by State Food Standard Commission, which establishes 8 per cent. milk fat.

Indiana—Not less than 8 per cent. milk fat and 18 per cent. milk solids; 1 per cent. gelatin or vegetable gums.

Iowa—12, 10, 10; 1 per cent. gelatin or vegetable gum.

Kansas—14, 12, 12.

Kentucky—14, 12, 12. Ruling of commissioner exists to effect that products containing other "harmless ingredients" may be sold when properly labeled.

Louisiana—10, 8, 8; 1 per cent. of harmless filler allowable.

Maine—14, 12, 12. Gelatin, starch, eggs or harmless fillers allowed in "limited amount."

Maryland—Ice cream, 4 per cent.; fruit ice cream, 4 per cent.; nut ice cream, 6 per cent.

Massachusetts—7 per cent.

Michigan—10, 8, 8. Standard requires use of eggs.

Minnesota—12 per cent.

Mississippi—14, 12, 12.

Missouri—14, 12, 12.

Montana—14, 12, 12; 1 per cent. pure gelatin allowable.

Nebraska—14, 12; no definition of nut ice cream; shall not "contain any ingredient deleterious or detrimental to health."

Nevada—14, 12, 12. Allows use of "eggs, starch, gelatin or other healthful food constituent." Goods below legal standard may not be sold unless designated "imitation ice cream."

New Jersey—No State standard.

New Hampshire—"Not less than 14 per cent. butter fat, nor more than one-fifth of 1 per cent. filler."

New York—No State standard. Local city ordinances in the larger cities.

New Mexico—No State standard.

North Carolina—14, 12, 12.

North Dakota—14, 12, 12. Gelatin ice cream to contain not less than 14 per cent. butter fat nor more than 3 ounces of pure gelatin to each 10 gallons.

Gum ice cream to contain not less than 14 per cent. milk fat and a "small quantity of gum powder free from starch or other cereal and free from harmful ingredients or foreign color."

Ohio—No State standard. Local regulations in the larger cities.

Oklahoma—14, 12, 12.

Oregon—12 per cent. butter fat; 1 per cent. "harmless thickener."

Pennsylvania—8, 6, 6; harmless coloring, eggs, and "not exceeding one-half of 1 per cent. of pure gelatin, gum tragacanth or other vegetable gums" may be utilised in manufacture.

Rhode Island—"Not less than 8 per cent. milk fat."

South Carolina—No State standard; local regulations in force.

South Dakota—14, 12, 12.

Tennessee—No State standard by enactment of Legislature. Local regulation by agreement with manufacturers calls for 8, 7, 7 per cent. of butter fat respectively, and allows the use of seven-tenths of 1 per cent. of "gelatin or other harmless stiffener."

Texas—8, 6, 6; one-fifth of 1 per cent. of "harmless filler."

Utah—14, 12, 12.

Vermont—No State standard; circular 19 standards semi-officially followed.

Virginia—8 per cent. with the use of pure cream; condensed milk may be used when product is so labeled.

Washington—No State standard.

Wisconsin—14, 12, 12.

Wyoming—14, 12, 12.

West Virginia—No State standard.

FORMULAS FOR ICE CREAMS AND WATER ICES

Vanilla

Boil 1 pound sugar with 2 quarts milk, and add the mixture to 1 pound sugar, 10 egg yolks already prepared by whisking up together. Mix these all well together and boil until the mixture thickens a little. Remove from the fire and add 3 quarts cream, which thoroughly incorporate by whisking. Add vanilla flavoring just before finishing. Strain and freeze in the usual way.

Vanilla

For 10 gallons of cream: Take 50 pounds (about 6 gallons) of aged 18 per cent cream (or 5½ gallons of cream and ½ gallon of condensed milk); about 8 pounds of sugar; 3 to 4 ounces of vanilla extract; and, if a binder seems called for, from 3 to 4 ounces of gelatin. The sugar should be thoroughly dissolved in the cream before freezing.

For 1 gallon of cream: 2 quarts of 22 per cent cream; 11 ounces of sugar; 1½ tablespoonfuls of vanilla extract. (Vermont Agri. Expt. Stat.)

Vanilla (French)

Place 12 ounces of powdered sugar, 15 egg yolks, 1 quart of cream and 1 split vanilla bean in a pan and heat over a slow coal fire, or, still better, in a hot water bath, until the mixture thickens, then strain through a coarse sieve. Put it back in the pan, set the pan in ice, or ice water, and beat until it becomes quite thick and firm. Then put in freezer and freeze. Next beat up 1 quart of double cream, sweeten lightly with fine sugar, and gently but thoroughly mix into the batch. Re-ice the can and let stand.

French Vanilla

Take two quarts of good cream, and a large vanilla bean split in half, the yolks of 12 eggs and a pound of sugar. Put the cream on the fire in a double boiler, and then stir in slowly the eggs and the sugar, the vanilla bean having already been added. When this begins to thicken take from the fire and allow it to cool. Do not freeze until it has become cold. Before it becomes cold, after taking from the fire, strain so as to remove any pieces of the bean. This quantity when frozen will make about a gallon of cream. It will be good, too. (Dwight Kempton.)

French Vanilla

Use 8 egg yolks to 1 quart of sweet cream, and 1 vanilla bean to every 2 quarts, and freezing in a French freezer, or at least after the French style. This cream is especially suitable for molding.

Vanilla (French type)

Take 5 quarts of cream, 2 vanilla beans, (or use a good vanilla extract); split the beans, scrape out the seeds and put them into the cream and add 2 pounds and 4 ounces of sugar. Put on a brisk fire, stir constantly and bring to the boiling point; then slowly stir in 20 egg yolks, previously beaten with a little milk or cream, and at once remove from the fire, strain and cool off, and freeze.

In the above formula vanilla beans are preferable to an extract; the former gives the better flavor.

French Ice Cream

This is nothing more than the cream boiled with an addition of a certain number of eggs or egg yolks. Opinions differ greatly as to which of the two mentioned is the proper method. But by using the whole egg (yolk and white together) for the production of ice cream the effect will be similar to that obtained by gelatin; it will make the cream lighter, gaining in quantity but not in quality; and when standing any length of time it is apt to transform it into small lumps of ice. Using the yolk only the cream will be of a smoother texture and more solid.

Chicago Picnic

Condensed milk, 14 quarts; fresh milk, 10 quarts; granulated sugar, 8 pounds; gelatin, 8 ounces; vanilla, 4 ounces.

Philadelphia

Cook 8 pounds of sugar in 2 gallons of cream. Bring it to a boil, when it should resemble skim milk; add and work in an additional 3 gallons of cream, 6 eggs and 2 ounces of vanilla. It is now ready for freezing. Must be very cold before freezing. A very delicious formula and used in some high grade stores.

Commercial

Formula No. 1

(Sells to retailer at $1.25 a gallon.)

Cream, 40%, 11 qts. @ .45	$4.95
Milk, grade B, 5 qts. @ .06½	.33
Cond. milk, 4 qts. @ .20	.80
Sugar, 9 lbs. @ .05	.45
Extract, 4 ozs. @ .10	.40
	$6.93

When expanded by freezing this quantity of ingredients produces 40 quarts of ice cream, containing 20 per cent. butter fat at a cost of 80 cents a gallon.

Formula No. 2

(Sells to retailer at 90 cents a gallon.

Cream, 40%, 3 qts. @ .45	$1.35
Milk, grade B, 13 qts. @ .06½	.85
Cond. milk, 4 qts. @ .20	.80
Gelatin, 4 ozs. @ .24 per lb.	.06
Extract, 4 ozs.	.40
Sugar, 7½ lbs. @ .05	38
	$3.84

These ingredients expanded by freezing yield 40 quarts of ice cream containing 7½ per cent. butter fat at a cost of 38 cents a gallon.

Formula No. 3

Cond. milk, 10 gals	$8.00
Milk, grade B, 10 gals	2.60
Plain water, 60 gals	
Gelatin, 4 lbs. @ .20	.80
Color	.01
Flavor	1.00
Sugar, 60 lbs. @ .05	3.00
	$15.41

These ingredients when expanded by freezing yield 120 gallons of ice cream at a cost of 13 cents a gallon.

The above formulas were quoted in the course of a case before the Iowa Law Court. No. 1 should make a high grade cream and No. 2 is in general use. The Editors of the Formulary do not recommend formula No. 3.

It was shown by the evidence presented that the cost to manufacture ice cream containing 20% butter fat is 45 cents a gallon; containing 7.7%, 29 cents; and that where condensed milk is used and the product contains 1.9% buter fat the cost is 15½ cents a gallon.

Commercial

Vanilla Ice Cream Without Cream or Milk

1 vanilla bean.
8 gills of syrup at 20 degrees.
18 egg yolks.

Cook and freeze, and then work in a meringue made of two egg whites and ¼ pound of sugar.

This formula is presented for what it is worth.

Reduced Cost Mix

Mix four pounds of sugar thoroughly with one ounce of powdered gum tragacanth No. 2, previously dissolved in a little hot water or milk. To this add five quarts of milk, five quarts of cream and one-half ounce vanilla extract. Dissolve thoroughly and freeze.

Milk Formula

A fairly good ice cream can be made from milk as follows: One gallon of milk, 18 whole eggs, or 10 whole eggs and 20 yolks of eggs, 2 pounds of sugar, flavor. Place ½ a gallon of the milk and half of the sugar on a slow fire to boil. Meanwhile mix the other half of the sugar with the eggs, stir the boilng milk into it, replace on the fire, and stir till the composition covers the blade of a palette knife, but do not let boil. Take off the fire and add the other milk at once, then strain, cool and freeze. The whole mixture may also be set on the fire at once, and beat with the egg beater until it comes to the boiling point, then finish similar to the preceding. Great care should be taken in selecting the eggs.

Hokey Pokey

Make a custard composed of 3 eggs, 1 quart of milk, 2 tablespoonfuls of corn starch, 6 ounces of pulverized sugar and sufficient of any desirable extract to flavor it. Bring the milk to the boil; mix the corn starch, 6 ounces of pulverized sugar and eggs; beat these smoothly together with a little cold milk and add it to the boiling milk; stir all till the mixture begins to thicken, then add and stir in the flavor. Now immediately remove it from the fire, and when it becomes cool stir it together and pour it into your freezer and freeze till solid.

Hokey Pokey

Dissolve three ounces of corn starch in one quart of milk, also soak two ounces of gelatin in a little milk or water. Place three quarts of milk and one pound and twelve ounces of sugar in a tin or porcelain-lined pan, set on the fire until boiling, then pour it over the dissolved starch and gelatin, set on the fire again and bring to a good boil, stirring constantly with the egg beater, then add one can of condensed milk, strain, cool and freeze. Flavor at will.

Another formula calls for six quarts of milk, one pound and twelve ounces of sugar and half a pound of corn starch. Dissolve the starch and one ounce of gelatin in one quart of milk. Then mix all together and stir on the fire till it boils; strain, cool, freeze and flavor.

Too much boiling will tend to curdle. In above formula it might be advisable to bring just to the boilng point.

Hokey Pokey

Into a bright and perfectly clean basin put 1 pound of fine sugar and 1 dozen eggs; mix these well together; then add and stir in 2 quarts of fresh cream or milk, 1 spoonful of salt and 1 tablespoonful of extract of vanilla; set the mixture on the fire and stir constantly till it thickens, but not curdles; strain into an earthen pan, cool, and stir into it 1 ounce of gelatin, dissolved in milk or water; now pour it into the freezer and work slowly during the whole process till it becomes well frozen; then remove the dasher and pack the cream firmly in brick molds and bury them in ice and salt until the cream is thoroughly frozen and hard; then turn them from the molds in the usual way and keep them in the ice cave or in a can imbedded in ice, or it may be cut with a knife, dipped in warm water, into suitable squares, wrapped in waxed paper and put in boxes and kept in the ice cave ready for sale.

Chocolate

Melt and make a paste of 10 ounces of chocolate with hot water and keep it warm until wanted. Cook 1 dozen eggs and 1½ pounds sugar in 2 quarts of cream. Add the chocolate and work it in while hot; cool and freeze in the usual way.

Chocolate

Make the foundation cream and whip 1 pint of cream to serve with it. Heat 2 bars of sweetened vanilla chocolate with 2 tablespoonfuls of water, or enough to melt it. When smooth add gradually a little of the hot cream or custard, and strain through a fine strainer or cloth into the remainder of the cream. If unsweetened chocolate be used, add 2 tablespoonfuls of sugar to it while melting.

Half of a teaspoonful of Ceylon cinnamon may be mixed with the chocolate, or half an inch of stick cinnamon may be boiled with the cream or milk; it gives a rich, spicy flavor. Or add 1 tablespoonful of caramel.

Chocolate

Two quarts of cream, 1 pound and 4 ounces of sugar, ½ a pound of fine sweet chocolate, or 5 ounces of chocolate liquor, 1 piece of whole cinnamon, 1 vanilla bean. Cook the cream with the cinnamon, add the sugar and vanilla, warm the chocolate and dilute it with part of the hot cream, mix with the rest of the cream, strain through fine muslin, let cool and freeze. The fountain man may consider it best to leave out the cinnamon; not everyone likes it.

Chocolate

Put 5 pounds of bitter chocoalte in a pan; place the pan in hot water and let it remain until the chocolate is melted; put 4 pounds of sugar and ½ pound of glucose in a copper pan, adding enough water to dissolve the sugar; then cook to a syrup (35° on a syrup gauge), and while the syrup is hot pour it in a small stream into the melted chocolate, stirring the latter while adding the syrup. Keep up this stirring until the chocolate becomes a smooth paste; then set it away in an earthen vessel for use. In flavoring put a pound of the paste into a pan and warm it till melted by putting the pan in hot water; then add a little plain cream to it, mixing well, and afterward adding the chocolate to the cream to be flavored.

Chocolate

Sweet cream, 2 quarts; sweet milk, 3 quarts; powdered chocolate, 1 pound; table salt, 1 teaspoonful; eggs, whipped, 4; extract vanilla, 1 ounce; sugar, 5 pounds. Add the powdered chocolate to 1 pint hot milk and make a smooth paste; then add to balance of ingredients, and let the mixture stand in freezer well iced (no salt) until ice cold. Then salt the ice and freeze. N. B.—Three ounces French gelatin may be substituted for the eggs.

Chocolate

Two quarts of cream, 12 eggs, 2 to 2¼ pounds of sugar, 10 ounces of chocolate. Melt the chocolate, dilute it with a little hot water into a smooth paste and keep it warm. Cook the eggs, cream and sugar and work into the mixture while hot the chocolate; then cool and freeze.

Chocolate

Three quarts of cream, 1½ pounds of sugar, 12 ounces of chocolate, 1 ounce vanilla sugar. Cook the cream, then add the sugar and vanilla; heat the chocolate and work it with 4 ounces of boiling water or milk to a smooth paste; add it to the hot cream, strain, cool and freeze. When serving, spread a spoonful of whipped cream on each dish.

American Chocolate

Twelve ounces of unsweetened chocolate (chocolate liquor), 3 pounds of powdered sugar, 5 quarts of sweet cream, a small piece of whole cinnamon. Melt the chocolate over a slow fire, gradually add a little sugar and cream, also the cinnamon, have the chocolate quite thin and fully dissolved, then stir it into the cream, add a good flavoring of vanilla, strain into a can and freeze in the usual manner.

Chocolate (French type)

Four quarts of cream, 10 ounces of chocolate, 2 pounds and 6 ounces of sugar, vanilla flavor, 12 egg yolks. Slowly melt the chocolate in the boiler, adding sugar and cream gradually, constantly stirring until it has reached the boiling point; then add the yolks in the same manner as for vanilla cream, strain and cool, then add vanilla flavor and freeze.

Vassar

Sugar, 2 pounds; chocolate, 4 ounces; milk, ½ gallon; cream, ½ gallon; ground hickory nuts, 2 to 4 ounces, or as much as desired. Freeze as you would prepare ice cream.

Fudge

Four ounces of grated chocolate and one pound of sugar melted together. To this add one quart of milk and the well-beaten yolks of one dozen eggs. Add one ounce of caramel coloring. Put over fire and stir until mixture coats spoon. Cool. Add beaten whites of eggs and one pint of whipped cream. Serve with fudge sauce.

This ice cream must not be kept long as it will get frosty.

Fudge

Chocolate, 4 ounces; sugar, 2 pounds; milk, ½ gallon; cream, ½ gallon; ground hickory nuts, 2 to 4 ounces. Bring the milk to boiling, add the sugar, stirring all the time, and set aside. Grate the chocolate and work it with about 8 ounces of boiling water to a smooth paste; add to the previous solution along with the cream, strain through fine muslin, cool, stir in the powdered nuts, and freeze the same as any ice cream. Too much chocolate makes the cream dark and rough and destroys its fine flavor.

Coffee

Steep ¼ cup of coarsely ground coffee in 1 pint of cream or milk 20 minutes. Remove it, let settle, and pour off carefully, then strain it and add it to the remainder of the cream or custard. This is sufficient for 1 quart of ice cream made according to either recipe.

Coffee

Make ¼ cup of filtered coffee, or, if you have no filter coffee pot, put 2 heaping tablespoonfuls of fine ground coffee in a fine strainer placed in a bowl. Then pour through it one-third of a cup of boiling water. Pour the liquid through a second time, and if not clear strain it through a fine cloth. Add this clear liquid to the hot cream or custard, and make the ice cream in the usual manner.

This formula is adapted more to home than to fountain use.

Coffee

Cook a quart of cream; add to it and stir well in 4 ounces coffee finely ground and roasted to a pale brown. Let it draw for 15 minutes, then set aside to settle in a warm place. Strain through a fine muslin. Cook another quart of cream, add 1 pound sugar and the coffee, thoroughly stir and allow it to cool, then freeze.

Coffee

Place 3 ounces of finest ground coffee into a coffee machine and filter, and pour about 5 cupfuls of boiling water on top of it. When all the liquid has passed through the filter and has cooled, pour it into a large bowl with 12 ounces of pulverized sugar, 8 yolks of egg and 2 whites, 1 ounce of powdered tragacanth and 1 quart of double cream.

Coffee

Four quarts of cream, 1 pound 12 ounces of sugar, 8 egg yolks, 3 ounces of good ground coffee (or the equivalent of extract). Place sugar, half of the cream and coffee in the pan over a slow fire, keep stirring until it has reached the boiling point; then mix up egg yolks with the remainder of the cream and pour it in, and bring to the point of boiling. Strain through a fine sieve or cloth, then cool off and freeze.

There are a few very fine coffee extracts on the market and a better cream may be obtained by adding one of them, from 8 to 10 ounces, to a 5 gallon batch. Every lot of "homemade" coffee extract varies so much that the quality of the ice cream is liable to suffer thereby.

Coffee

One pint of strong coffee, two cups sugar, one pint milk, one quart cream, one tablespoonful arrow root, one-half teaspoon vanilla, two eggs well beaten; wet arrow root in a little milk and add to the coffee when boiling, stir to keep from burning, add milk and let boil two or three minutes; when cold, add the other things and freeze as you would ice cream. When nearly frozen add one pound English walnuts ground or chopped very fine. Makes about three and one-half quarts. (Henri Delasse.)

Coffee

The mix for coffee ice cream is made in exactly the same proportions as for vanilla and maple. In fact it is very often a practice to add the coffee flavor to a vanilla ice cream, made as above specified, and the result may be depended upon to be satisfactory. The real flavor is in the coffee syrup. That must be good, and the following method has been found to produce eminently agreeable results:

Take 10 rounding tablespoonfuls of high grade coffee and place them in 1½ quarts of cold water. Bring this to a boil quickly and boil for 5 minutes vigorously. Strain through several thicknesses of cheesecloth. Then to the resulting liquid add 2½ quarts of sugar, which is dissolved and the whole mass brought to a boil. This will produce about 2 quarts of coffee syrup, which is enough to flavor about 10 gallons of ice cream. If a darker color is required it can be secured by adding 2 or 3 ounces of burnt sugar (caramel) to the batch.

This coffee syrup may be kept in jars almost indefinitely, and used as a flavoring or for a dressing for coffee sundaes, etc. (Vermont Agri. Exp. Stat.)

Vienna Coffee

Place 1 gallon of vanilla ice cream into a can imbedded in ice and salt, work it well with a spatula in order to get it smooth. Then beat up the whites of 12 eggs with 12 ounces of fine sugar over a slow fire (like you would prepare a sponge cake), add to the ice cream and freeze all until nearly solid. When the mixture has reached this condition, add ½ pint of good strong Mocha coffee flavoring and keep freezing a while longer. Flavor with kirschwasser and serve.

Coffee Supreme

Freshly roast eight ounces of a good quality coffee. Grind and add two quarts of milk and 2 pounds and a half of sugar. Set on fire and steep very gently one hour, finally letting it come to a boil. Set aside to cool. Strain, and pour upon the thoroughly beaten yolks of 20 eggs. Cook until mixture coats spoon but not a moment longer. Cool and fold in beaten whites of eggs, also one quart of whipped cream. Freeze.

Caramel

Put ½ cup granulated sugar in a saucepan over the fire, and stir till melted and dark brown. Add ½ a cup of boiling water and simmer 10 minutes. Make either ice cream you prefer, using only half the sugar given in the recipe. Add enough of this caramel to give the desired flavor and color. Caramel may be added to vanilla or coffee ice cream. Whipped cream or marshmallow whip may be served with it, or stirred in when the caramel cream is partly frozen.

Excelsior Caramel

Four quarts of 22 per cent. cream, and sufficient liquid caramel to give an agreeable flavor. This should be only slightly bitter. Into a double boiler put one dozen beaten egg yolks, one quart of cream, a little salt and two and one-half pounds of sugar. Cook until the mixture will coat a spoon thickly, then add to caramel cream. Freeze.

Maple

Three quarts of cream, 1½ pounds of genuine maple sugar. Cook the cream in a farina boiler, stirring frequently, until the water in the outer pan is boilng; then take it off the fire, add the maple sugar previously pounded into small pieces, and stir until the sugar is dissolved; let stand a few minutes, strain, cover with gauze, and let stand till cold; then freeze like any other ice cream. Should the cream be too white, add a little burnt sugar to give it a rich color.

Vermont Maple

For 10 gallons of cream: Take 6 gallons of 18-22 per cent cream—or the cream-condensed milk alternative given in the vanilla recipe—from 6 to 8 pounds of maple sugar, varying according to taste; and, if desired, 3 to 4 ounces of gelatin.

For 1 gallon: Two quarts 22 per cent cream, 9 to 11 ounces maple sugar, and enough common sugar to complete the sweetening.

Light-colored and delicately flavored maple sugar is not the best for ice cream making. The dark brown, strongly flavored variety—be sure it is not burnt—makes by far the best cream, and the quantity used must depend upon the sugar itself. As made by the Vermont sugar farmers the sugar content varies greatly, and when the proper flavor has been obtained in the ice cream mix ordinary sugar can be used to bring the sweetness up to the required point. (Vermont Agri. Exp. Stat.)

Arctic Taffy

Dissolve 6 pounds maple sugar in a hot water bath, allow to cool, and then strain into 5 gallons of cream. Add 4 pounds of brown sugar, a little caramel and freeze. Should the brown and maple sugar be dark, no additional coloring will be necessary. Nuts may be added to improve this delicacy.

Ginger Ice Cream

Two cups scalded milk; 1 cupful of sugar; 1 tablespoonful flour; 1 egg. A pinch of salt. Make this into a smooth custard, adding one tablespoonful of extract of ginger. Cool. Add one quart of light cream and one-half cup of Canton ginger cut in small pieces. Freeze.

Gingered Cream

Scald two quarts of milk and four quarts of cream. Add five cups of sugar and four ounces of extract of ginger. Freeze and serve with a dressing made of equal parts of ginger and vanilla syrup containing bits of chopped preserved ginger.

Ginger

Two quarts of heavy cream, one pound of sugar, one lemon, half a pound preserved ginger, grated rind of two lemons. Scald half the cream, the sugar, and finely chopped ginger in a double boiler. Cool. Add the rest of cream, lemon juice, and grated lemon rind. It might be well in this formula to add the lemon juice to the sugar first.

Fruit

If preserved berries, raspberries or strawberries, are used they should be added to the mix after it is partially frozen, else the fruit and heavy syrup will sink to the bottom of the mix and remain there. If fresh fruit is used it should be well chopped or crushed, and sugar added to it some time before it is added to the mix. It, too, is put into the cream after the latter has been partially frozen, but in this case it is in order that the acid in the fruit may not coagulate the cream, as might be the case if it was added when the cream was quite warm. (Vermont Agric. Exp. Stat.)

Fruit

One pint of milk, 2 cups sugar, 2 eggs, 2 tablespoonfuls gelatin soaked in a little cold water, 1 quart cream, 4 bananas, ½ pound candied cherries and other fruit if desired. Let milk come to a boil, beat flour, sugar and eggs together and stir in boiling milk. Cool 20 minutes, then add gelatin. When cold, add cream; put in a freezer, freeze 10 minutes, add fruit, and finish freezing.

Strawberry

Six quarts of cream, 3½ pounds of sugar, two boxes of sweetened, crushed strawberries. Strain and freeze at once, as berries have a tendency to curdle cream.

Crushed Strawberry

Beat cream, 3 pints; pulverized white sugar, 12 ounces; 2 whole eggs. Mix all in a porcelain-lined vessel, place on fire and heat to the boiling point, stirring constantly. Remove and strain through a hair sieve. Place in a freezer and freeze. Now take 1 quart of ripe strawberries, select, hull, and put in a china bowl. Add 6 ounces pulverized white sugar and crush all down to a pulp. Add this pulp to the frozen cream along with 2 tablespoonfuls of extract of vanilla and mix well. Give the freezer a few additional turns until the mixture hardens.

Strawberry

2 quarts strawberries
2 quarts rich cream
3 pounds sugar
2 tablespoonfuls vanilla

Mash the berries thoroughly and mix with the sugar, stirring until the latter has been perfectly dissolved. Then add the cream and the vanilla, and freeze. Some people add a few whole strawberries to make the dish look pretty when served, but this is not always effective as the whole berries become icy. Do not expect this cream to be bright in color; it will shade on the pink, and will be somewhat mottled. Three or four scrapes of nutmeg to a quart of berries will bring out the berry flavor as in no other way, and no one will detect the spice. Nutmeg will accentuate the flavor of strawberries, raspberries or blueberries. The above amounts when frozen will make about six quarts of cream. Freeze hard. Previous soaking overnight in clear syrup and then draining, will keep the fruit from freezing hard. (Dwight Kempton.)

Strawberry

Whip two quarts of cream, sweeten with 12 ounces of powdered sugar and add 1½ pints of crushed sweetened strawberries which have been strained. Freeze.

Strawberry Cold Cream

Two quarts strawberries and one quart sugar mashed together and put through a strainer. Combine this with one quart of cream and one quart of whipped cream. Freeze. A bit of nutmeg added to the fruit might improve the flavor of this cream.

Strawberry (fresh)

Four quarts of cream, 2½ pounds of powdered sugar, enough ripe strawberries passed through a sieve to make 1 quart of juice, mix all together, add a little color if needed, although fresh berries need little coloring. Strain and freeze at once. The mixture should not be left standing, as the juice will tend to curdle the cream.

Raspberry

1 quart of rich cream
1 quart raspberries
1 pound sugar

Wash and pick over a quart of red ripe raspberries and crush them carefully, saving all the juice. Dissolve a pound of sugar in a quart of rich cream, and when thoroughly dissolved add the raspberry pulp and juice. Stir this mixture well so that the fruit may not settle at the bottom of the freezing chamber, and then freeze hard. While this is an exceedingly simple recipe it is delicious when prepared according to the directions.

As in the case of all fruit or nut creams, it is best in the above formula to partly set or freeze the cream, then add fruit or nuts. (Dwight Kempton.)

Gooseberry Tart

Prepare three quarts of nice gooseberries by washing and rubbing blows from the ends. Stew these with two and one-half pounds of sugar and one and one-half pints of water. When thoroughly cooked, rub through a strainer. Add a few drops of green coloring, three pints of sweet cream sweetened to taste, or a custard mix may be used. Freeze.

Maraschino

Take the yellow rind of 2 lemons, put this in the boiler with 2 quarts of cream and 1 pound of sugar, place the mixture over a slow coal-fire, constantly stirring until it thickens, not allowing it to come to a boil; add 10 egg yolks in the usual manner, then strain and occasionally stir it until it is cold. When cold pour in freezer and freeze. Then beat up stiff 1 quart of good double cream and incorporate it, with ½ pint of maraschino, paddling it up very lightly; let stand about one hour before serving.

Wild Cherry

Two teaspoonfuls extract wild cherry, 1 ounce almond extract, 1 pint red currant jam, 1 pint preserved cherries, 8 ounces cherry syrup, 1½ pounds sugar, 4 quarts cream.

Proceed as before, adding blended chopped fruit when mixture is partly frozen.

White Cherry

Put 2 cups of sugar and 1 cup of water in a saucepan over the fire. Stir until the sugar is dissolved and let the syrup come to a boil. Drop in carefully 1 quart of California white wax cherries and simmer gently for 15 minutes, strain carefully, add a quart of cream to the syrup and freeze. When the freezer begins to turn hard, beat well, take out the dasher and stir in the fruit. Pack and let stand for two or three hours before serving. The ice cream is a good novelty feature.

Red Currant

One quart red currant jam, 4 quarts cream, 2 pounds sugar, 4 ounces lemon syrup, 1 ounce lemon extract.

Proceed as before, adding the red currant jam which has been reduced to a smooth mass with the lemon syrup, just as ice cream commences to stiffen.

Red Currant

Put four pounds of ripe, red currants, two pounds of sugar, four cupfuls of water into a small kettle. Let the mixture come to a boil. Strain and add two quarts of cream and one pound of sugar. Freeze.

Tom Tucker

Two quarts plum or greengage jam, 4 quarts cream, 1½ pounds sugar, 6 ounces lemon syrup.

As plum skins are rather tough frozen, blend jam and lemon syrup and press through a coarse colander or sieve. Proceed as before, adding fruit when cream is partly frozen. If purple plums are used, add a few drops of purple coloring; if greengage, green coloring; red plums, red coloring. This formula may be improved by sweetening to taste.

Quince

Use one pound of preserved quince pulp to a gallon of vanilla mix. Freeze. Serve with a dressing made of the quince juice and walnut meats. (Benj. L. Barry.)

Grape

Mix in the proportion of one quart of grape juice to one quart of cream, one pound of sugar and the juice of one lemon. Freeze. In this formula add the lemon juice to the pound of sugar as the first step. Mix the sugar well and then add the grape juice. Again mix and finally add the cream. (U. S. Dept. of Agric.)

Grape

To each quart of any good vanilla mix, add one cup of sweetened grape juice and one-fourth of a cup of lemon juice.

Dissolve 1 pound of sugar in your lemon juice before adding to mix. It will curdle if you don't.

Apricot

Put one quart can of apricots, syrup and all, through a sieve, rejecting the skins. Add an equal quantity of hot water and a saltspoonful of salt. When boiling, stir into this eight heaping tablespoonfuls of cornstarch rubbed smooth with one quart of cold milk. Cook until smooth and free from lumps. Beat into this the juice of two lemons, one-fourth cup of butter, and one pound of sugar. Freeze.

Apricot

Three quarts of 22 per cent. cream sweetened with two pounds granulated sugar. To this add one-pound can of apricots which have been put through a sieve. Color with a dash of red and flavor with an ounce of extract of almond. Freeze.

Apricot

To each quart can of apricots forced through a coarse sieve add one quart of water and one pound of sugar. Scald one pint of cream and add one tablespoonful of cornstarch rubbed smooth with water. Pour hot mixture over four well beaten egg yolks and return to fire until cooked. Cool and fold in the stiffly beaten white. Combine with apricot mixture and freeze.

Apricot

One quart apricot pulp, prepared by peeling about two dozen apricots; boil with ½ pint of water till dissolved; stir while on the fire and rub the pulp through a hair sieve; 1 quart double cream, 1 quart syrup, 32 degrees. Flavor with a few drops of essence of apricot or peach kernels.

Apple

Peel, cut and core about two dozen apples and make them into a stiff marmalade; pass through a sieve with 1 quart of cream; sweeten to taste; add a little lemon juice; freeze.

Baked Apple

Bake a dozen sound tart apples. Remove skins and cores. Mash and sift pulp. Incorporate with this half a teaspoonful of extract of cinnamon, two ounces of rose water, two ounces of strained lemon juice and sugar enough to sweeten. The amount will depend upon the tartness of the apples used. Scald a quart and a half of cream and add when cooled to apple mixture. Fold in one pint of whipped cream. Freeze.

Pineapple

Boil in three cupfuls of water for 15 minutes one pint of sugar and a pint of shredded pineapple. Add to this a teaspoonful of gelatin, softened in cold water. Press the mixture through a cheesecloth, and when it is cold add the juice of two lemons. Freeze it to a "mush" consistency, then add a cupful of cream beaten solid. Fill the chilled pineapple shell, set it in a mold, and bury in salt and ice for half an hour before serving. (Robt. J. McBride.)

Pineapple Ice Cream

One quart grated pineapple added to three pints of heavy cream. Let stand one-half hour. Add 1½ cups of sugar and freeze.

Hawaiian

One quart shredded preserved pineapple, 1 pound minced preserved ginger, 4 ounces lemon syrup, 4 quarts cream, 2 pounds sugar.

Scald sugar, ginger, and half the cream. Combine when cold with one quart of plain cream, one quart of whipped cream and lemon syrup. Freeze.

Hawaiian

To one-quart can of grated Hawaiian pineapple add a cup of sugar over which has been squeezed the juice of one lemon. Add a pint of milk, a pint of scalded cream, and a pint of whipped cream. Freeze.

Lemon

2 quarts milk
2 quarts cream
3 eggs (whites)
3 lemons (juice)
Grated peel of one lemon.

This must be cooked. Bring to a boil one gallon of the milk combination in a double boiler. Beat the whites of three eggs very light, or so stiff they will stand alone. When the milk-cream comes to a boil take from the fire and stir in the white of egg, stirring slowly. Squeeze three large lemons upon the sugar, removing all seeds and pulp from the juice. Let this stand an hour. Then when the milk-cream is cold and the lemon juice and sugar have become incorporated stir the latter into the milk-cream, grate in the rind of one lemon, sweeten to taste—depending largely upon the acidity of the lemons—and freeze at once. Do not mix the lemons and milk until just before you are ready to start freezing as the milk is liable to curdle. On this account lemon ice cream is going out as a commercial product, and, instead, home cooks are making lemon ice.

Lemon

Rub off the yellow outside rind of 4 lemons, on hard lumps of sugar, 4 quarts of cream, 2 pounds of sugar, including the lump sugar flavored with the essential oil, 4 egg whites. Mix well together, put in a lined kettle and place on the fire, constantly stirring until the cream has reached the boilng point, but not allowing it to boil. Then take it off, immediately strain it through a sieve and cool. When cool, pour into freezer; when nearly frozen add the juice of the lemons. Observe that while the zest of the yellow rind is to be worked into the batch at the outset, yet the juice is not to be added until the cream is nearly frozen. The reason is that if the lemon juice is added before the mixture is frozen it is apt to curdle the cream.

While this formula may be used in the soda department it should be observed that an unnecessary amount of labor is called for.

Lemon Tart

To the strained juice of a dozen lemons add three pounds of sugar. Dilute four cans of condensed milk with three times the same quantity of water. Add this to the sugar and lemon juice slowly. Fold in the stiffly beaten whites of 12 eggs. Freeze.

Orange

1½ pints orange juice
1½ pounds sugar
1½ pints milk
1½ pints thin cream

Dissolve sugar in orange juice and gradually add milk and cream, also a little salt. Freeze.

Orange

Two quarts orange juice, 8 grated orange rinds, 4 cups sugar, 2 pints condensed milk, 1 pint water.

Combine orange juice, grated rind and sugar. Freeze rather hard, then add condensed milk and the pint of water which has been used to rinse out milk cans. Freeze again and serve. This will not stand, but is very nice to serve to a special party or during rush hours, when it will all be used up soon.

Orange

To 4 quarts of cream, 2 large oranges and 1 lemon are required, with an addition of 2 pounds of sugar. Secure the orange flavor by rubbing off the rind on lump sugar. In default of hard sugar you may grate off the yellow skin on a grater. Be careful not to rub off the white pith beneath the surface. Using sugar flavored with the essential oil will bring out the flavor in all its purity and strength, and this mixed in turn with the juice will produce a satisfactory confection, beverage or cream.

Orange (with condensed milk

Heat one can of condensed milk and one pint of plain milk in double boiler. Beat six eggs thoroughly and add half a pound of sugar. Pour heated milk over eggs and sugar and return to fire. Cook until mixture coats spoon. Remove from fire, cool, and add one pint of concentrated orange syrup, the grated rinds of four oranges, another can of condensed milk made thin with half a pint of cold milk, one ounce of orange extract, and a little pure food yellow coloring matter. Freeze.

Frozen Oranges a la Nippon

Take 4 quarts of rich cream, 2 pounds of fine sugar, 8 eggs, ½ pound of rice boiled soft in a quart of milk, 4 ounces of curacoa, and a compote of 4 oranges. Mix the sugar, eggs and cream; place them on the fire and stir with a whisk until the mixture is at the boiling point; then remove it from the fire and add and stir in the boiled rice and liquor, and freeze the composition. Then fill the mold and imbed it in ice and salt till needed for use. When turned out on a dish garnish round the base with pieces of oranges of the compote, and pour the syrup over all.

Peach

Two quarts of cream, 1 pound of sugar, enough good, ripe peaches mashed and passed through a sieve to make 1 pint of juice, mixed with a little syrup or fine sugar. This all stirred together and frozen at once. All fruits which contain acid, being of a tart nature, should not be left standing after being incorporated with the cream, therefore it is advisable to add the juice when the batch is nearly frozen. A little pink coloring is preferred by some ice cream makers; this, of course, is only a matter of taste.

Peach

2 quarts ripe peaches
1 quart of rich cream
6 drops almond extract
2½ pounds sugar

Take two quarts of ripe peaches, pare them and mash them fine, being careful to lose none of the juice. Make them very sweet, as freezing has a tendency to offset the sugar, and fruit thus prepared if "just right" to eat will taste sour after coming from the freezer. Measure the crushed peaches and to each quart of the juice and pulp add a quart of rich cream. Add 6 drops almond extract to the cream. Then put into the freezer and freeze carefully. If frozen too hard the fruit will be icy. This quantity will make something more than three quarts. (Dwight Kempton.)

Peach Royal

Add six cups of sugar, in which have been incorporated 1½ cups strained lemon juice, to a pint of scalding cream. Cool, and add two quarts of milk. When mixture is partly frozen, add three pints of mashed peach pulp and finish freezing.

Banana Glace

To the pulp of one dozen bananas add one pint of water, one pint cream, and the strained juice of three oranges. Boil water and sugar 10 minutes, cool, and add bananas and orange juice. Put in freezer and add whipped cream when it begins to stiffen.

Banana Whip

Peel and crush a dozen bananas. Squeeze over bananas juice of ½ lemon. Rub through sieve and mix with pulp two cups of strained orange juice and three cups of sugar. Soak one ounce of granulated gelatin in a little cold water and dissolve in a cup of boiling water. Beat fruit pulp smooth, adding slowly one pint of milk and dissolved gelatin. Place in freezer and when mixture begins to stiffen add a quart of whipped cream and half an ounce of banana extract. Let stand three hours after it is frozen. Serve in tall stemmed glasses and garnish with a cherry.

Tutti Frutti

Make an ice cream of 4 quarts of rich cream, 2 pounds of white sugar, 4 eggs, 1 fine vanilla bean, split and cut crosswise into small pieces; mix all well together in a bright and clean copper basin; place on the fire and bring the mixture just to the boiling point, stirring it constantly with a wire whisk; then immediately strain it through a hair sieve into an earthen or stoneware pan; when cool, pour it into the freezer and freeze; turning the crank slowly till it is frozen in and difficult to turn; then remove the dasher and add about a quart of preserved and slightly dried fruits, cherries, pineapples, strawberries, apricots, greengages, peaches, etc., all cut small and in equal portions to form the required quantities; add also, if at hand, 4 ounces of kirschwasser and the juice of 2 lemons; work all these thoroughly well into the cream by means of a long-handled spatula; then draw off the surplus water from the tub and repack it with fresh ice and salt; cover all with blankets or cloths and set aside for an hour or two to harden and ripen.

Tutti-Frutti (with condensed milk)

Mix one pint can of condensed milk with two quarts milk. Make a custard of this by using eight egg yolks, one and one-half cups of sugar, and a tablespoonful vanilla flavoring; bring just to the boiling point. Add a pound of candied, mixed fruits chopped. When mixture begins to stiffen in freezer, fold in beaten whites of eggs.

Navy Pudding

1½ cups orange juice
¼ cup lemon juice
½ cup grape juice
Sweeten to taste.

Whip 1 pint of heavy cream with ½ cup of powdered sugar and 1 teaspoonful of vanilla and fold in ⅔ of a cup of walnut meats.

Add one tablespoonful of gelatin soaked in cold water and dissolved in one cup of boiling water to the fruit juice mixture. Add a little more sugar if necessary. Pour this fruit mixture into brick molds, about one-third filling. Fill with the whipped cream mixture. Pack in ice and salt.

Mille Fruits

Apricot juice	½ pint
Black cherry juice ..	½ pint
Greengage juice	½ pint
Lemon wine	½ pint
Crushed sugar	2 pounds

Dissolve the sugar with gentle heat in the juices and wine, set aside in the refrigerator or on ice to cool.

Sweet cream	8 pints
Crushed sugar	2 pounds

Cook these in a water-bath boiler until the water in the outer pan boils and the sugar is dissolved. Then put the syrup on ice to cool. When thoroughly cold, add the before-prepared and cooled juices and sugar, and pour the mixture into the freezer; freeze well, occasionally scraping the mixture from the sides of the freezer to insure thorough admixture. Be sure that your freezer and all utensils used in the manufacture of the ice cream are scrupulously clean.

Honeymoon

Make a good vanilla mixture leaving out the vanilla flavoring. To each gallon add one ounce of lemon flavoring and one ounce of peppermint. Tint a delicate pink and freeze.

Lallah Rookh

Cut some French cherries, apricots and angelique and pour over it some Madeira and stand in hot place. Then make a mixture of French vanilla and freeze, leaving one cup of the liquid behind; when frozen hard enough, add the fruit and some broken ladyfingers and finely crushed macaroons. Then let it stand and when firm fill in molds, imbedding them in broken ice and salt for fully one hour. Next dissolve some gelatin in a little warm milk or water and add it to the remaining custard. When wanted for use, turn the pudding on the dish upon which it is to be served and sprinkle a little chopped fruit over it, then add some whipped cream with the previously prepared custard, flavored with Madeira.

Violet S. C.

Sweet cream	1 gallon
XXXX sugar	1¾ pounds

Strain through fine sieve into freezer and add a little violet color and violet extract to taste.

Especially good for teas. (W. O. Rigby.)

Orange Pekoe

This ice cream takes its name from the kind of tea used in the making. Take 3 tablespoonfuls of orange Pekoe tea, stir it into a saucepan containing a pint of hot milk and allow it to stand for five minutes. Then add a cupful and a half of sugar, the yolks of 4 eggs and cook the mixture in a double boiler until it thickens. Strain, incorporate a little salt, the grated rind of an orange and 2 cupfuls of thick cream; freeze.

NUT, FRUIT AND BISQUE ICE CREAMS

Pistachio

Scald a quart of milk with two quarts of cream. Add three cups sugar and a pint of whipped cream, an ounce and a half of pistachio extract and a little certified leaf green coloring. Freeze.

Marron

Split and roast 2½ dozen chestnuts, then remove the skin and place them in a copper kettle with 2 pounds of granulated sugar and 1 pint of water, place the mixture on the fire and cook to the hard crack, or about 300 degrees. Then pour it on an oiled marble slab. When cold pound it in a mortar with enough sweet cream to form a soft paste. Put this on the fire with 5 pints of cream, constantly stirring until it has nearly reached the boiling point, then beat in 20 yolks, previously mixed with some cream or milk. Strain, and when cold add a good flavoring of vanilla.

Another method: Take the same amount of preserved marrons, rub them very fine with 1 quart of sweet cream and pass the mixture through a sieve; pour this in a pan and dilute with 1 pint of vanilla cream, and then freeze. Then whip up one quart of double cream, sweeten lightly and flavor with maraschino, mixing it thoroughly. Charge 15 cents.

Roast Almonds

One pound almond meats, 2 ounces caramel, 2 ounces vanilla, 4 quarts cream, 2 pounds sugar.

Prepare the almond meats by blanching and roasting in olive oil to a light golden brown. Pound to a paste and blend with this the caramel and vanilla extract. Scald 2 quarts of cream with 2 pounds sugar. Add almond mixture and cool. Mix one quart of plain, cold cream with this and one quart of whipped cream. Freeze. Charge 15 cents per service.

Roast Almond

Roast 1 pound of blanched almonds to a nice yellow. Then put 2 pounds of sugar in a copper kettle, set on the fire and stir slowly all the time until the sugar becomes liquid and of a golden color, then add the roasted almonds; give the mixture a few turns and pour it on the greased marble, and when cold pulverize it in a mortar; then place this in the boiler with 4 quarts of cream. Proceed in the usual manner, adding 8 egg yolks.

Burnt

Put over the fire ¾ pound raw almonds, previously blanched, and ¼ pound sugar until the sugar has taken on a delicious brown. Turn the batch, put on a greased slab and let it cool, then pound in a mortar. Put it into 3 quarts cream, add 1½ pounds flour and some vanilla flavoring. Cook as for other cream, then strain and freeze.

Almond Cocoanut Special

Two quarts of heavy cream, one pint of milk, one pound sugar, two tablespoonfuls of vanilla, one tablespoonful of almond. Scald half the cream with the sugar melted in it. Flavor when cool. Add the rest of the cream and milk, one-half pint of dried and rolled macaroons and half a pint of dried and rolled cocoanut cakes. Charge 15 cents. (Robt. Sellers.)

Hazelnut

Roast 5 ounces of hazelnuts to a light brown color, then remove the skins. This is best done by rubbing the roasted nuts in a towel, removing the skin, then put in a sieve and the skin is easily shaken off. Pound them in a stone mortar with some milk to a fine pulp. Next put 4 quarts of cream into the boiler over the fire, 12 egg yolks, beaten up with some of the cream, and added before it has reached the degree of boiling. The hazelnuts should be added to the cream at the outset, thus increasing the flavor. Pass through a fine sieve, and when cold freeze in the usual manner.

Peanut

21 pounds 18 per cent cream.
4 pounds granulated cane sugar.
1 teaspoonful peanut butter, dissolved in one-half cup of boiling water.
Caramel color to give light brown color.

Freeze as usual. To prepare this ice cream two-thirds cream and one-third milk may be used. (Roy C. Potts.)

Nut Fudge

Heat one gallon of milk to boiling point in a water bath with a pinch of salt and add four pounds of sugar. Take one-half pound of powdered cocoa or grated chocolate and make into a smooth paste with boiling water.

From the scalded milk take one quart and add to the cocoa paste and cook thoroughly or there will be a raw taste. Add this to the rest of the milk and combine with this one gallon of cream and 12 ounces of hickory nut meats cut fine. Freeze.

Coca Cocoanut

Mix fresh shredded cocoanut with chocolate ice cream thoroughly, taking care not to use too much cocoanut as this makes the cream hard, then pack in brick moulds. (C. W. Webb, Ice Cream Trade Journal.)

Caramel Nut

Put one pound of granulated sugar in a saucepan and stir until it becomes a fine, light golden brown. When nicely browned, add a pint of boiling water and boil until a smooth syrup has formed. Scald one quart of milk and mix one pound of granulated sugar with three ounces of corn starch. Mix smooth with cold milk and add to hot milk. Beat four whole eggs light and pour hot mixture over it, stirring at the same time. Cook until smooth. Add one pint of cream and one can of evaporated milk thinned with half a pint of cold milk. Combine half of the caramel syrup with this mix and one pint (dry measure) chopped nut meats.

Caramel Fig

Place two pounds of sugar in an aluminum dish and stir slowly as it melts. Allow it to scorch slightly until it becomes a rich brown. Remove from the fire and pour over this a pint and a half of boiling water. To this liquid add three pints of scalded milk. With this mixture make a cooked custard using the beaten yolks of eight eggs, a pound of sugar, half a cup of flour, and a pinch of salt. Cool and strain into the freezer can. Add three pints of heavy cream and when partly frozen stir in two pounds of figs cooked until tender in hot water, then drained and chopped. Charge 15 cents.

Maple Walnut

Two quarts of cream, one pint maple syrup, standard thickener, two teaspoonfuls vanilla, one tablespoonful caramel, one pint chopped walnut meats.

Lemon Nut

Add the strained juice of 3 lemons to 2 teacupfuls of sugar. Add gradually a partly frozen mixture of 1 pint cream and 1 quart of milk. Work in ½ cupful chopped walnuts and freeze at once.

Georgian Special

Make a rich fruited strawberry ice cream. Use a center mold and as a center use a combination of shredded cocoanut and sliced peaches, which have been stirred to a proper consistency, to make a firm center. (C. W. Webb.)

Frozen Nut Mousse

Scald two quarts of milk. Mix two pounds of sugar with four tablespoonfuls of flour, a pinch of salt, two ounces of vanilla extract and six beaten eggs. When these ingredients are thoroughly incorporated, pour the hot milk upon them. Stir and return to a water-bath until mixture thickens. Cool; add two quarts of plain cream, two quarts of whipped cream, and one quart dry measure of mixed chopped nuts. Freeze. Charge 15 cents.

French Royal

One gallon 30 per cent cream, 3½ dozen eggs, using yolks only; 3½ pounds granulated sugar; 1½ ounces extract of vanilla; 2 pounds assorted fruit (candied), chopped fine; 1 pound marrons (chopped); 1 pound pecans (chopped); 1 pound filberts (chopped). Take 2 quarts of cream and mix with it the egg yolks and sugar; put the mixture into a kettle and slowly cook under constant stirring, being very careful not to boil or burn the same. When the mixture is thoroughly cooked, remove from the stove and cool; add the rest of the ingredients named in the formula and put all into the machine and freeze.

To serve, take a six-inch plate and on it place a small lettuce leaf; now take a disherful (10-to-the-quart) of the above mixture and put it on the lettuce leaf, add a spoonful of whipped cream flavored with a little sugar and Maraschino liquor and top off with a green cherry. Sells for 20c with a nice profit. It might be well in this formula to add the nuts when the mix is nearly frozen or to beat in after and let set. (F. F. Thompson.)

Fig Walnut

3 pints milk
1 pound sugar
10 eggs
2 teaspoonfuls salt
1½ pounds chopped figs
1 quart cream
1 ounce vanilla
½ pound walnut meats

Use milk, sugar, salt and egg yolks to make a custard. Cool, add flavoring, beaten egg whites and the cream whipped stiff and chopped nut meats. Freeze.

Delmonico

Pure cream	2 gallons
Good milk	6 quarts
Yolks of 10 eggs.	
Sugar	4 pounds
A standard foam producer	2 ounces

(2)

Ground nuts	1 pound
Broken cherries	1 pound
Sherry wine	1 pint

Mix all together.

Rub up the sugar, foam and eggs with part of the cream and heat a few minutes; gradually add the milk and half of the cream, and, lastly, add 2 ounces of essence of pepsin and put on ice to congeal.

Whip the remainder of the cream and white of the eggs separately, and then mix the two; when the cream begins to freeze add the whipped cream and, when nearly frozen, add formula No. 2.

X'mas Delight

Take 3 quarts milk, 1½ pounds sugar, yolks of 10 eggs, 1 quart thin cream, ½ teaspoonful of salt, ½ cupful of pineapple syrup, and 3 cupfuls of sweet chestnuts Make a custard of the first four ingredients, then add the thin cream, pineapple syrup, and boiled chestnuts forced through a strainer. Now take two 2-quart brick ice-cream molds, and line each with the mixture; add one cupful of candied fruits, cut into small pieces; ½ cupful of Sultana raisins; ½ pound of Malaga grapes cut into halves, and about one dozen chestnuts, also cut into halves. Fill the remainder of the space in the molds with the custard mixture, cover the molds and pack in salt and ice for several hours. When ready to serve, remove the cover carefully and take out the brick, which slice into one-inch slices. In dispensing, add to each slice of the mixture whipped cream, sweetened and flavored with Maraschino. Place each slice on a neat plate, and serve with wafers and a spray of holly or mistletoe, or a paper napkin indicative of the holiday season. (Walter Luick.)

Bisquit Tortoni

To make 2 quarts: Beat 12 egg yolks with ½ pound of sugar over a hot fire until steam begins to rise; remove from the fire to ice and continue beating until the mixture becomes quite stiff, then stir in wineglassful of sherry and 3 ounces of bisque crumbs. Pour into a 2-quart brick or melon mold thinly lined with frozen apricots. Pack in ice and salt for two hours.

Be careful to overfill the mold, as the mixture will shrink somewhat as it congeals. Price 75 cents per quart. To serve price at 20 cents.

Bisque Macaroon

Twelve macaroons, 12 sunshine biscuits, 4 quarts cream, 2 pounds sugar, 2 ounces vanilla.

Roll macaroons and biscuits to fine crumbs. Scald 2 quarts cream and all the sugar. When cool add one quart plain cream and one quart whipped cream and vanilla. When mixture begins to stiffen in freezer add crumbs. Adding at this time they do not soak but remain distinctive in taste.

Macaroon

2 quarts cream
1 pint rolled dry macaroons
1½ pounds sugar
1 ounce vanilla

Scald half the cream and add macaroons and sugar to hot cream. Cool. Mix rest of cream and flavoring. Freeze. Charge 15 cents.

Macaroon Nut (with condensed milk)

Plain cream one gallon, whole condensed milk one-half gallon, mixed with one gallon plain milk and three pounds of sugar. Pistachio flavoring 1½ ounces, and one pint each of chopped nut meats and powdered macaroons. Sweeten to taste.

Bisque of Pineapple

One can of pineapple, 1 pound of sugar, 1 quart of cream. Chop the pineapple small and put it in a bright pan or kettle with the sugar and a few spoonfuls of juice or water to dissolve the sugar to syrup; let it simmer at the side of the range a short time. Whip the cream till it is half froth; then freeze it first by itself, because the pineapple added before freezing has a tendency to curdle it. Pound the pineapple and syrup through a colander; mix them with the partly frozen cream and freeze again. The pineapple in syrup should be prepared beforehand to be cold.

In making these bisques it is not best to pound the fruit perfectly fine, but the small pieces, about like grains of wheat, should be perceptible, and show that the creams are mixed with fruits and not merely flavored.

Fruited Bisque

Whipping cream, 3 quarts; powdered sugar, 6 ounces; best vanilla extract, 1½ ounces; one pineapple, sliced in cubes; three oranges, sliced in thin strips; pecan nuts, in halves, 2 pounds. Mix the sugar, vanilla extract, and whipping cream until the mixture is very stiff. Place the fruit in a separate bowl, cover with sugar and stand on ice until the sugar is dissolved. Pour off the juice into a bottle to use as a sauce. Mix the fruit and nuts in whipped cream, then place in quart brick ice cream packers and freeze until hard. To serve, put one-eighth of a brick on a round china dish and pour on a small quantity of sauce with three Maraschino cherries neatly arranged on top in triangular outline. Serve with three nabisco wafers and a glass of water. Charge 15 cents per service. (Alexander McDonald.)

Maple Nut

Take 18 ounces of maple sugar and break into small pieces, place in a water bath with four ounces of cream. When softened add slowly 18 yolks beaten light. Beat constantly until mixture begins to thicken. Remove from fire and cool. Add to this three pints of whipped cream, four ounces of macaroon crumbs and four ounces of chopped walnut meats. Freeze. Give small servings as this is very rich. Charge 15 cents per service.

Royal Bisque

Use any good formula for vanilla ice cream but caramelize half the sugar before using. To each gallon of the mix use one and a half cups of chopped hickory nut meats and a dozen finely rolled macaroons.

Macaroon Fruit

To each quart of any good vanilla mix, stir one dozen dried and rolled macaroons and 12 ounces of fruit, using four ounces each of preserved strawberries, chopped seeded raisins, and chopped canned peaches. Use fresh fruit when possible. Charge 15 cents per service. (Robt. Sellers.)

Brown Bread

Make an ice cream composition of 1 quart of cream, 12 ounces of sugar and 5 or 6 eggs and cook and freeze as usual. Pound 2 ounces of genuine dried Boston brown bread into dust, sift and beat into the ice cream.

Chocolate Malted

One-half pound of malted milk mixed with one-half pound of granulated sugar, one ounce of powdered chocolate and one and a half quarts of water. Put over fire and bring to boiling point. To this mixture cooled add half an ounce of powdered dissolved gelatin, one ounce of essence vanilla and one pint of whipped cream. Freeze.

Chocolate Almond Bisque

Cut one-half pound of cake chocolate into pieces. Place in water bath with one pint of milk. Stir until smooth, adding one-half pound of sugar and one quart of cream. Stir until smooth and cool. Mix this with three quarts of plain cream, one quart of whipped cream and one-half pound of roasted almonds chopped fine. Freeze.

Malted Pineapple

Mix two quarts of cream and three quarts of milk in which one pound of malted milk has been dissolved, 2½ pounds of sugar and one pint of shredded pineapple. Freeze slowly.

Marshmallow Macaroon

With sharp, clean scissors snip two pounds of marshmallows into tiny pieces. Dry and roll two pounds of macaroons to a fine powder. Soak marshmallows and macaroons in two quarts of cream for one hour. Soak 10 level tablespoonfuls of granulated gelatin in eight ounces of cold milk until soft. To this add two quarts of scalding hot cream and one pound of sugar. Allow to cool. Combine with marshmallow and macaroon mixture and add two quarts of whipped cream. When the mixture is partly frozen, stir in two pounds of chopped and drained cherries.

MOUSSES

Chocolate

Put the yolks of 16 well-beaten eggs into a water-bath container. Add one quart chocolate syrup and cook until mixture coats spoon heavily. Set container in ice water and beat until frothy and cold. Turn into freezer and fold in two quarts of whipped cream. Pack in ice and salt until frozen.

Chocolate

Melt over the fire 4 ounces of good chocolate, with half a glassful of water; let boil up several times, then cool. Pour the chocolate in a bowl; add 12 ounces of pulverized sugar, 8 yolks and 2 whites of eggs, 1 ounce of tragacanth, previously dissolved in hot water or milk, and 1 quart of double cream. Beat and finish as for vanilla.

Cocoa Mousse

Mix ½ pound cocoa and 3 cups sugar. Cook with 2 cups boiling water till smooth. Add to 3½ quarts milk scalded with cinnamon bark; cook for 10 minutes. Beat in 3 beaten eggs, mixed with cup sugar and a pint of whipped cream. Cool, flavor with vanilla extract and freeze. Serve in cups garnished with whipped cream. (Janet McKenzie Hill in Ladies' Home Journal.)

Coffee

Soak four tablespoonfuls of granulated gelatin in cold water. When soft, dissolve in one pint of hot, strong, black coffee. Allow to cool and then stir in one quart of heavy cream and one quart of whipped cream. Add three cups of sugar and a pinch of salt. Freeze.

Coffee Neapolitan

Two quarts strong, clear coffee, 2 quarts cream, 8 eggs, 2 pounds sugar, 4 level tablespoonfuls corn starch or ice cream powder, 1 ounce vanilla.

Cook one quart cream in double boiler with well-beaten egg yolks. Into this beat the blended flour and sugar. Cook until mixture will coat spoon To this add coffee, boiling hot, stiffly beaten egg whites and the other quart of whipped cream. Freeze.

To make this delicacy extra fine use hot milk, or boil the fine ground coffee in milk, then strain several times.

French Coffee Mousse

Put 2 ounces of freshly roasted coffee in a mortar, just enough to thoroughly crush the berries without reducing them to powder. Put the crushed berries into a pint of milk with 6 ounces of sugar, let boil, then leave the mixture until cold; strain it on the yolks of 6 eggs in a double kettle, and stir the mixture over a fire until the custard thickens. Be sure that it does not curdle. When quite cold work into it 6 ounces of whipped cream. Freeze the mixture in an ice cream freezer, then fill a plain mold with it and replace in the freezer until time to serve. Recommended as a dainty dish for fashionable trade in hot weather.

Maple Mousse

Six eggs whipped; one-half teacupful maple syrup and one quart of whipped cream. Mix thoroughly and slowly freeze. Chocolate and coffee mousses may be made in the same manner by substituting these syrups and using sufficient to give the desired flavor.

Maple Mousse

Stir six ounces of maple syrup into the beaten yolks of eight eggs and cook in a double boiler until the mixture thickens. Remove from the fire, turn into a mixing bowl and beat until cold. Then add a pint of cream, previously whipped stiff, folding the two together thoroughly but not beating them after they are mixed; turn into a mold and pack in ice and salt for a few hours, or until the mixture is sufficiently frozen.

Vanilla

Take 1 quart of "double" cream, place half of it on the fire with two vanilla beans; boil it up; let cool and strain. Place 12 ounces of pulverized sugar into a large bowl; beat up with 8 yolks and 2 whites of eggs; then stir in with the beater the cream with the vanilla, and afterwards the other half of the cream; also 1 ounce of powdered tragacanth. Place the mixture on ice, with very little salt, and stir with the beater; as soon as it commences to rise in the bowl fill or pile in glasses or silver goblets; set them immediately in the freezing box, and let stand for two hours. The mousse is then ready to serve. The whole operation should be performed in a cold place. Charge 15 cents per service.

Lemon Cream

Heat two pounds of sugar with two quarts of water until thoroughly dissolved. To the strained juice of one dozen large lemons add two more quarts of cold water. When the mixture is partly frozen add two quarts of whipped cream flavored with vanilla and almond. Finish freezing.

Cherry

2 tablespoonfuls granulated gelatin
½ cup cold water
1 pint cherry syrup
5 tablespoonfuls lemon juice
1 pound sugar
2 quarts cream

Soak gelatin in cold water. Heat cherry syrup hot and add gelatin, also sugar and lemon juice. Allow to cool until mixture begins to thicken. Fold in the cream which has been whipped. Pack in salt and ice and let stand four hours.

Strawberry

Wash and mash 5 ounces of clean strawberries through a sieve, add 1 pint of double cream previously whipped stiff. Now add 4½ ounces of icing sugar to which has been previously added a tablespoonful of lemon juice, transfer the whole to a small freezer and freeze, occasionally scraping the mixture from the sides of the freezer and mixing with the part not frozen, but without working the cream.

Strawberry

Wash and hull two boxes of ripe strawberries. Sprinkle them with one pound of sugar and allow to stand in cold place one hour. Mash and force through a fine sieve. Dissolve two ounces of powdered gelatin in eight ounces of boiling water and add strained juice of two lemons. Add to strawberry pulp. When it begins to thicken fold in two quarts of slightly sweetened whipped cream, and one ounce of strawberry extract. Pack in ice and salt and allow to stand four hours.

Plum Mousse

Boil two pounds of sugar and eight ounces of water until it will spin a thread. Pour this hot syrup over the stiffly beaten whites of 16 eggs. Beat until cold and add four quarts of whipped cream. Fold into this two quarts of sifted slightly sweetened plum pulp. Pack in ice and salt until frozen.

Pineapple (crushed)

One quart milk, 10 egg yolks, pinch salt and three cupfuls of sugar cooked over water until the spoon is coated. Cool, add one quart whipped cream, four cups shredded pineapple, two cups of pineapple juice and two ounces of pineapple extract. Freeze.

Melon Mousse

Press the fruit and remove the seeds; slice the fruit and put into a preserving kettle. To one good-sized melon add a half-pound of sugar and cook until the fruit is soft. Add a quarter of an ounce of gelatin which has been soaking in a very little cold water, and rub the mixture through a sieve and flavor with a tablespoonful of wine. When the mixture is cool beat it with a whip until it is light, then beat in a generous quart of whipped cream and place upon a glass dish and serve very cold.

Rubio

1 pint cooked prune puree
1½ pints milk
4 ounces lemon juice
1½ pints heavy cream
salt
1 pound sugar

Soak prunes all night in cold water. Cook until soft, remove stones, and press pulp through a strainer. Add sugar, lemon juice, and a little salt. Whip cream and fold in. Freeze.

Nevada Nut Mousse

Scald one quart of milk in a water bath. Thicken with four heaping tablespoonfuls of corn starch blended with one pound of dark-brown sugar and mixed with water to make a smooth paste. Turn the hot milk on this and return to fire. Stir until thoroughly cooked. Beat four egg yolks and turn part of hot mixture on this and return all to fire for 20 minutes. Strain into freezer can, and add one quart of whipped cream, half an ounce of vanilla and half a pound each of walnut and pecan nuts cut fine. Freeze.

Brazilian Fruit Mousse

3 pints milk
1½ pounds sugar
10 yolks of eggs
1 teaspoonful salt
1 quart cream
½ ounce almond extract
½ ounce vanilla
1 pint of chestnut puree
½ pint Maraschino
1 pint glace fruits

Make a custard of milk, sugar, egg yolks and salt. Cut fruits in tiny pieces the night before and soak in Maraschino, covered with a plate and weight to keep fruit under liquid. Add soaked fruits to custard, also chestnut puree, cream and flavoring. Freeze. Serve with a heavy sprinkling of chopped Brazil nuts. Charge 15 cents.

Elk

Place 10 yolks of eggs into a farina boiler, add 2 vanilla beans, split in halves, set on very slow fire and beat the yolks until they form a thick body; remove the boiler from the fire and beat until cold. Now make Italian meringue of four whites of eggs and 9 ounces of sugar, add this to the beaten yolks, and when the composition is entirely cold, add 1 strong pint of whipped cream. When the composition is well mixed, add 8 ounces of preserved fruits cut into small dice and soaked in good Maraschino, and last 2 ounces of finely crushed macaroons.

Ambrosia

Well whip 1 quart of rich cream (40% butter fat), then gradually work into it, by whipping, 8 ounces of powdered sugar, sprinkling on the sugar with one hand and beating the mixture with the other. When thoroughly mixed, put it into a gallon ice cream can and tub, selecting a can with a notched lid; pack the can and turn as in freezing ice cream, cutting away the frozen cream adhering to the sides of the can with a spatula at intervals of every three minutes. Continue the operation until the whole mass is frozen, then add two bananas previously cut and crushed in an earthen bowl or crock, two oranges sliced in quarter-inch pieces, and 3 ounces of freshly grated cocoanut, mixing thoroughly. The mousse is now ready to serve and should be made fresh each day. Serve a No. 16-to-the-quart dipperful in a sundae glass and top with a little whipped cream and a cherry. Sells for 15 cents. (A. Philipp.)

FANCY FROZEN DESSERTS

Berry Banana Parfait

Make the custard for the cream at least two hours before freezing, so that it will be very cold when wanted. For this custard bring three cupfuls of milk to a boil, dissolve one and one-half cupfuls of sugar in it and turn immediately over the well-beaten yolks of three eggs. Cook the custard over hot water until it thickens, then strain; add six tablespoonfuls of orange-flower water and set aside to cool. When this is ready to freeze add to this custard one dozen bananas that have been pressed through a fine sieve or fruit press and one pint of double cream that has been whipped to a stiff froth. Chill this well in the freezer before adding the strained juice of three lemons. Finish freezing it and leave it two hours to ripen. Serve in tall glasses or sherbet cups with a covering of fresh berries and whipped cream on top of each portion. Charge 15 cents.

Frozen Egg Sherry Parfait

Rich cream, 2½ gallons; granulated sugar, 3½ pounds; good sherry wine, 1 quart; eggs, 2½ dozen; powdered nutmeg, 1 heaping teaspoonful. Beat the eggs to a froth, add the sugar, cream, nutmeg and wine; stir thoroughly, place in a freezer and run about eight minutes. In serving, place in a sundae dish, top with whipped cream and sprinkle over with a little nutmeg. This formula is especially recommended.

Emperor

Grate 2 pineapples, also the rind of 2 oranges and 2 lemons, add the juice of 4 oranges and 6 lemons, half of a nutmeg grated. Next make a boiling syrup of 3 pounds of sugar and 2 quarts of water and pour this over it; let stand until cool, then strain. Put this in the freezer and add 1 pint of strawberry juice and freeze, then mix in 2 well-beaten egg whites. Just before serving add the following liqueurs: half pint of Maraschino, 4 ounces of kirschwasser, 1 pint of champagne cider and a little curacoa.

Frozen Chocolate Pie

Four ounces of powdered chocolate, four ounces of sugar and four tablespoonfuls of hot water. Melt chocolate and sugar in water and add one quart of cream. Scald. Turn hot mixture over four eggs well beaten with one cup of flour, one pint of milk, one teaspoonful of salt and two cups of sugar. Beat thoroughly and return to fire and cook half an hour in double boiler, stirring frequently. Remove and cool. Add one pint of whipped cream. Freeze. Serve small rounded mound from a patent scoop in a puff paste tart shell. Top with marshmallow dressing.

Frosted Peach Pudding

Scald one quart of milk in double boiler. Into this stir four level tablespoonfuls of corn starch which have been rubbed smooth with a cup of cold milk. Cook half an hour, stirring frequently. In a separate dish beat five eggs, three cups of sugar and a dash of salt. Turn hot mixture upon this and beat briskly. Return to double boiler and cook five minutes. Remove and cool. Add one tablespoonful of almond extract, one quart of peach pulp and one quart of whipped cream. Freeze. Serve in tall stemmed glasses. Charge 15 cents.

Iced Bomba a la Montrose

Peach water ice, 1 pint; hazelnut ice cream, 1 quart; comfits, 1 ounce; rose pastilles or drops, 1 ounce. Line the mold with the peach water ice to form the coating or shell, and use the hazelnut ice cream in which the comfits and rose drops have been mixed, to fill the center; the bomba when filled and closed, is to be imbedded and remain in ice and salt, until needed.

Cafe Bomba

This is another style of bomba ice cream the formula of which is as follows: Put a quart of rich cream into a bright copper basin and thoroughly mix with it the yolks of 8 fresh eggs, ½ pint of the strongest black coffee, and a dessertspoonful of pure vanilla extract; place the basin on a slow fire, stirring constantly (do not let it boil). When it begins to thicken, take it immediately from the fire and add 12 ounces of powdered sugar; mix all well together; pour it into the freezing can, cover well with ice and salt; let it freeze for several hours without working it. If it is to be molded, pour it at once into the mold and bury the mold in the ice.

Frozen Oriental Dessert

Pour two quarts of scalding cream over a pound of freshly roasted and ground coffee and allow to stand until thoroughly cold. Beat 12 eggs very light and mix 1½ pounds of sugar. Combine with coffee and cream mixture. Place in a container over hot water and stir constantly until the mixture coats the spoon. Strain several times while hot through cheese cloth, add two quarts of rich milk and fold in one quart of whipped cream and two ounces of vanilla. Freeze.

Glace a la Bijou

Blanch ½ pound of sweet almonds and 1 ounce of bitter almonds, finely pound them in a stone mortar with 4 ounces of orange flower water, then add 1 quart of water and strain the mixture through a cloth. Put the strained liquid in a pan and add 14 egg yolks and 1 pint of syrup of 33 degrees on the syrup gauge, heat on a hot water bath until thickened, then remove and beat ten minutes longer. Next beat up a scant pint of double cream, add this with an Italian meringue mixture of 2 egg whites. Fill in bricks and pack in salted ice until frozen firm. Then turn out the bricks of cream and cut them in slices with a knife dipped in hot water, spreading a thin coating of cherry ice over the surface of each slice; now place the slices as finished in a fancy paper case, depositing them in the so-called ice cave, a can with many partitions or shelves imbedded in ice. This dessert may be made by using strawberry, raspberry, peach pulp or any other flavor than almond milk, the proportions being one pint of water and 1 pint of pulp to the above formula, but adding the corresponding flavor as coffee, vanilla, etc.

Cafe Royal

Mix well together 1 pint of thick cream, 2 ounces of powdered sugar, 1 teaspoonful of extract of vanilla, and one-third of a cup of very strong coffee. Chill thoroughly, then whip, setting the bowl in a pan of ice water. Take off the frost as it rises and lay on a sieve. When no more frost will rise, turn the drained whipped cream carefully into a mold. Cover tightly, binding the edges with a strip of muslin dipped in melted butter; bury in ice and salt as for freezing; let stand for two or three hours, wipe off the mold, and turn out on a serving dish.

Parisian Plombiere

Four ounces of French cherries, 4 ounces candied lemon, orange peel, also citron and currants. Flavor them well with rum. Next prepare the following custard: Two quarts of raw cream, 8 yolks and 12 ounces of sugar; make it after the manner of French ice cream. When frozen, incorporate the fruit and let stand for one hour. Then fill into melon molds, sprinkle with picked and washed currants and pack in ice until wanted. Serve with rum sauce.

Orange Souffle

Put 2 cups of granulated sugar and 1 cup of water in a saucepan over the fire. Stir until the sugar is dissolved, then let the mixture boil without stirring until the syrup spins a thread. Add 1 pint of orange juice and the juice of 1 lemon. Scald 1 cup of cream, add the beaten yolks of 2 eggs, stir them into the scalded cream, take from the fire, cool, and mix with the syrup. Stand away to cool and when thoroughly chilled add the remaining cup of cream, whipped. Flavor with half a teaspoonful of extract of vanilla. Color delicately with yellow color paste, then turn into the freezer and freeze as sherbet.

Peach Souffle

Two quarts cream, 1 quart peach pulp, 1 box gelatin, 1½ pounds sugar, yolks of 12 eggs.

Soak gelatin in cup cold water one hour. Add pint of boiling peach juice, stir until gelatin is dissolved. Add sugar and peach pulp and the thoroughly beaten egg yolks. Stand container in ice water until mixture begins to thicken, then add the cream which has been whipped. Be sure all ingredients are thoroughly blended. Pack in ice and salt and set aside to harden. Do not stir when freezing. The souffle should not be so very solid.

Pineapple Souffle

One quart crushed pineapple; 3 quarts warm water; ½ sheet or 1 teaspoonful gelatin; 3 whole eggs; 1½ ounces prepared lemon; ½ ounce solution acid phosphate. Sweeten to taste.

Frozen Fruits Souffle

Take 3 ounces of granulated sugar and 6 raw egg yolks and whip slowly, warming over boiling water while beating. When an almost solid froth remove and chill the bowl. Add carefully 1 pint of cream whipped to a solid froth and 1 cupful of mashed and sweetened fresh fruit—strawberries, raspberries, or grated pineapple. Turn quickly into wetted mold, cover tightly, bind around with a greased cloth or a strip of muslin and bury in ice and salt for 3 hours.

Frozen Custard

Frozen custard is composed of cream, sugar and whole eggs made after the manner of French cream, the necessary flavor being added to produce the different kinds of custard. This cream can be changed or cheapened by using half cream and half milk, or all milk with a corresponding number of whole eggs. The eggs are beaten up well with some milk or cream before being added to the hot batch on the fire; poured in slowly and kept stirring until it thickens, but not allowing the batch to boil. Then remove from the fire and strain, occasionally stirring until it is cold, then freeze after the manner of other creams.

Frozen Custard

To a quart of scalding hot milk add 3 eggs and 2 cups of sugar well beaten together; boil 3 or 4 minutes; add a little salt. When cool, flavor, put into freezer and freeze.

Frozen Swiss Custard

Break 3 dozen strictly fresh eggs in a mixing bowl and beat thoroughly. Then take 3½ pounds of sugar and 15 ounces of a standard cocoa, mixing well until the mixture has taken the form of sweetened chocolate. Beat this with the eggs previously prepared, until a perfectly smooth paste is obtained. Add 2 gallons of 20 per cent cream and one gallon of condensed milk, and cook slowly in a steamer or "double boiler" until hot (do not boil); remove from the fire, strain well, and surround with ice or set in a cold place to cool. When cold, freeze slowly until the custard is hard enough to stand, and then put it into a dish.

The author states that by carefully following the instructions given the operator "will experience no difficulty in making a light Swiss chocolate having the smoothest texture that ice cream can assume, and one that takes well with the trade which appreciates something new as a few days' special. It leaves a very pleasant after-taste and has been particularly successful with the 'hard-to-please' Chicago public. The price is 20 cents a dish, but it can be served at a very good profit for 15 cents." This formula is particularly recommended. (Chas. Greenberg.)

French Maple Custard

Two quarts of cream or rich milk, 12 eggs, 1½ pounds maple sugar. Pound the maple sugar first, then beat the yolks of the eggs, add the maple sugar and beat again; whisk the whites of eggs to a stiff froth, stir them briskly into the yolks and sugar and mix with the cream, cook the whole in a farina boiler over a good fire, stirring constantly until it does not run off easily from a knife which has been dipped into it. Be careful not to let it curdle. Strain, cover and let cool; then freeze.

Most maple creams are made ⅔ rich cream and ⅓ rich milk. Pure maple syrup may be added to advantage in place of the sugar. Unless great care is exercised in melting the sugar it will grain in the cream. Plenty of maple flavor is also used, artificial, of course.

Cranberry Frappe

Boil two quarts of cranberries in one quart of water until thoroughly cooked. Strain through a sieve, add the juice of two lemons, one quart sugar and one pint of scalded and cooled milk. Freeze.

Pineapple Frappe

Place in a large bowl 1 quart of good cream, 12 ounces powdered sugar, 4 whole eggs or 8 yolks, white of 2 eggs and 1 grated pineapple; also a spoonful of pulverized gelatin dissolved in a little milk or one ounce of finely powdered gum tragacanth. Stir well until the sugar is dissolved, then set the bowl on ice, well salted, and beat with an egg beater. When the mixture starts to rise considerably, fill in glasses or silver goblets and place in the ice cave. They are ready to serve in about an hour and a half to two hours. Charge 15 cents.

Frozen Grape Punch

Heat 4 pounds of ripe grapes in an earthenware jar that has been placed in a larger vessel of boiling water and simmer until the fruit is tender and the skins burst. Then squeeze the grapes and return the juice to a granite saucepan, add to every cupful of the liquid three-quarters of a cupful of sugar, the strained juice of an orange, and half a cupful of lime syrup. Simmer slowly five minutes, and when quite cold, freeze to the consistency of mush. Now remove the cover, stir in half a pint of whipped cream flavored with three drops of mint flavoring, and continue freezing until hard and firm. Serve in crystal sherbet cups ornamented with crystallized mint leaves.

Marbleized Ice

Contains five flavors—vanilla, chocolate, strawberry, pistachio and orange, which are combined in the following proportions: Take 1 gallon of vanilla, 1 gallon of strawberry, 5 quarts of chocolate, 3 quarts of pistachio, and 3 pints of orange. Place them in a large mixing can, and then mix with a paddle until the creams have been separated and woven evenly through the mass. Then place the cream in molds, packing carefully, and remove to the hardening room where it should be allowed to remain 45 minutes. If you have no hardening room pack in ice and salt as you would any brick cream. (Chas. Morgensten.)

Neapolitan Ice Cream

This cream consists of four different flavors packed in layers into brick molds and cut into slices when served. The first layer being orange or lemon water ice, the next strawberry ice cream, then chocolate ice cream and last, vanilla ice cream.

Most ice cream makers use 3 ice creams and do not use ices.

Silver Leaf Parfait

Boil two cupfuls of sugar and two cupfuls of water until the mixture spins a thread. Pour this on to the beaten whites of six eggs. Add one quart of cream whipped until stiff. Flavor with lemon and vanilla. Put into freezer (adding one cupful of shredded, candied citron when partly frozen).

Promise of Youth

Rub one pound of lump sugar upon cleanly washed lemon rinds until well flavored with the lemon oil. Drop this sugar into one quart of fresh buttermilk and allow to dissolve. To this add one pint of scalded and cooled cream and one pint of whipped cream. When the mixture has begun to freeze add the strained juice of four lemons.

Baked Ice Cream

Place a thin sheet of sponge cake on a waxed paper, on a board, and then put on a brick of ice cream and frost it thickly over all the sides, topping off with powdered sugar frosting. Set the board in a hot oven long enough to brown the frosting. Sometimes a salamander is used for heating, and the frosting is put on with a pastry bag. Serve at once and charge 20 cents per service.

Meringue Glace

Make the meringue shells of any suitable size, have them dry and crisp. Fill the halves with any cream desired, placing two together, then put them into the ice cave or into an empty can imbedded in broken ice and salt. Before serving, bind together the two halves with a bright colored ribbon.

Bachelor's Glace

This delicate dish is something like a frozen Tom and Jerry, needing neither cream nor milk. Make a boiling syrup, 1½ pounds of sugar with 1 pint of water. Next beat up 28 egg yolks with ½ pound powdered sugar and slowly stir in the syrup, put in freezer and freeze. Then add ¾ of a pint of kirschwasser, and lastly 6 beaten egg whites. Fill in paper cases of any size and place in ice cave. Price, 20 cents.

Junket

Sweet new milk, 18 quarts; rich cream, 6 quarts; sugar, 10 pounds; extract of vanilla (or other flavor), 6 ounces; junket cream tablets (Hansen's), 6. Dissolve the sugar in the mixed milk and cream, add the flavoring and color if desired. If the mixture is cold, gently heat it to lukewarmness (from 80 to 100°F., not more). Dissolve the junket tablets in a cup of cold water and pour the solution into the mixture of lukewarm milk, and stir vigorously for a minute or so to thoroughly incorporate the junket solution. Allow the mixture to rest undisturbed until it forms a jelly-like mass (from 15 to 30 minutes). If the milk is somewhat acid this will not take more than 5 or 10 minutes. Watch the mixture, trying it with a spoon on the top, but do not stir the body of the material. When thickened, transfer to a ten-gallon freezer and freeze quickly and without interruption. Do not allow the mixture to stand in a warm place after it has thickened, and do not disturb it until it is to be frozen.

A good formula of its kind but only a very low grade fountain would use it.

Frozen Tonic

Into one quart of freshly made and strained hot beef tea stir one tablespoonful of gelatin previously dissolved in one-half cup of cold water. Mix one-fourth pound of malted milk to a smooth paste with one pint of water, and add one pint of shredded preserved pineapple. Combine mixtures and freeze.

Frosted Egg Nog

Beat the yolks of 10 eggs until light and add slowly two cups of sugar and the grated rind of one orange and the strained juice of four. Add two quarts of rich milk and the beaten whites of the eggs. Freeze. Price, 15 cents.

Frozen Pudding a la Napoleon

Blanch 1 pound of filbert kernels; pound them with ¾ pound of sugar and a few drops of water to a soft and fine pulp; put them into a basin, add 1 quart of single cream, stir it well together and pass it through a sieve or tammy into a puree; then freeze in the usual manner. While the above is freezing, a pint of cherry ice must be made, as follows: Take 2 pounds of ripe cherries, bruise them thoroughly in a mortar so as to break the stones; take them up in a sugar saucepan, add 12 ounces of sugar and boil the whole together over a brisk stove fire for about five minutes; rub this through a hair sieve into a bowl and freeze it, adding a little thin syrup if necessary; mix also in about ¼ pound of French cherries cut in halves. Line the mold with this delicate-tinted ice, and garnish the center with the filbert ice cream; cover the mold and immerse in rough ice until dishing-up time. The pudding must be turned out, garnished around with wafer cauffres, filled with some of the filbert ice cream reserved for the purpose and served immediately.

Frozen Pudding a la Edwin Davenport

Make a custard of 1 pint of cream, 8 yolks of eggs, half a pint of pineapple syrup, 8 ounces of sugar, 6 ounces of chestnut farina or rice flour and 1 ounce of vanilla sugar, 4 ounces of pineapple, cut small; 4 ounces of Sultana raisins, a gill of kirschwasser and a half pint of double cream whipped; mix the custard and liquor, freeze the composition, add the fruit and whipped cream and mold the ice.

The molds for frozen puddings are generally made round or oval and smooth, without any design, in order to facilitate remolding.

Plum Pudding

Plum pudding ice cream is a delicious frozen goody. It is made up of chocolate ice cream, nuts, raisins, currants and candied citron peel, in the proportion of eight ounces each of nut meats, raisins and currants and two ounces of shredded citron peel to a gallon of cream. Soak fruits and nuts in syrup, drain, and add to cream when near finish of freezing. This formula makes a good Thanksgiving or Christmas feature.

Frozen Banana Pudding

Peel and cut in slices 18 bananas, then mash them fine, dissolve 1½ pounds of sugar in 2 pints of water by heating, strain, and, when nearly cold, add the bananas and the freshly expressed juice of 2 oranges. Put in a freezer, turning slowly until frozen, then remove the dasher and stir in carefully 2 pints of whipped cream. Serve in glace tumblers.

Blackberry Frozen Pudding

Into two quarts of scalded milk stir three level tablespoonfuls of cornstarch rubbed smooth with a cup of cold milk. Cook half an hour in double boiler, stirring frequently.

Remove from fire, add two cups of sugar and one quart of whipped cream. Put in freezer, and when mixture begins to stiffen add two quarts of crushed, sieved blackberries and one cupful of orange juice Finish freezing and pack for two hours.

Frozen Pudding a la Marshall

Make the same custard as for frozen plum pudding, using vanilla flavor instead of curacoa. When frozen add the following ingredients, previously prepared: One pound of stewed pineapples, 1 pound of white pears, 4 ounces of sultanas, steeped in 4 ounces of Maraschino, ½ pound of lady cake, cut into cubes and sprinkle with kirschwasser. First mix the fruit into the batch, then lightly beat in the lady cake with 1 pint of double whipped cream. Next in order is to line the molds, using in this case raspberry ice; fill the interior with the fruited batch, finish in the usual manner, and serve with Maraschino sauce. To make this sauce follow thè formula for rum sauce, using Maraschino for flavoring.

Frozen Banana Pudding

Slice four bananas and soak in Maraschino syrup. Take one pint of banana pulp, 12 ounces of sugar, 1 pint of water and the juice of 4 lemons; strain and add the well-beaten whites of two eggs, and freeze. When this is done, line a pudding mold with good vanilla ice cream, place in the bottom a layer of banana ice, then a layer of soaked banana slices and a few lady fingers, then another layer of banana ice, and so on, until the mold is filled. Pack in ice to harden and serve with Maraschino sauce.

Frozen Pudding

4 pints milk
1 pound sugar
1 teaspoonful salt
5 eggs
2 tablespoonfuls cornstarch or arrowroot
1 pint heavy cream
1½ pints candied fruits—pineapples, apricots, raisins, figs, etc.
½ cup brandy or ½ cup Maraschino cherry juice

Cut fruit very fine and soak one hour in chosen menstruum. Make a custard of milk, sugar, eggs, salt and cornstarch, or arrowroot. Add cream and freeze. Add fruit near end of freezing. Charge 15 cents.

Frozen Plum Pudding

Cut up a quantity of preserved fruits, such as dates, candied citron, seedless raisins, sultanas and figs; put them in a stewpan with some rum for flavoring and steep for one hour. Then make a custard in the usual manner of 1 quart of cream, 8 yolks and 6 ounces of sugar, add enough burnt sugar color to give it a coffee color, and a good flavoring of curacoa and freeze. When frozen hard enough mix in the fruit and continue freezing a few minutes longer. Next imbed the melon molds in salted ice and line them with orange water ice, then fill in the fruited batch and again cover the top with orange water ice; then lightly secure the cover and pack the molds in ice and let remain for two hours. This pudding is served in slices with a rum sauce. This formula is more adapted to the catering business than for fountain use.

Frozen Pudding a la Indian

Take a convenient size large melon mold and line it, cover and all, with a fine marron cream, made of 1 quart of cream, 10 yolks of eggs, 10 ounces of sugar, 4 ounces of marron pulp, vanilla and a little caramel sugar for flavoring; line the mold a little over half an inch thick. Have previously a fine strawberry ice of 1 quart of water, 1 pound of sugar, 1 basket of crushed strawberries, the juice of 2 lemons, the whites of 2 eggs; freeze good and solid, fill the interior of the melon mold and set in rough, salted ice for two hours to harden. At serving time turn it out of its dish and serve with sweet cream sauce, highly flavored with marron syrup. Charge 20 cents.

Patrician Pudding

Make a rich custard by using four quarts of milk, two pounds of sugar, one and one-fourth cups of flour (use an eight-ounce measuring cup), one-fourth pound of butter, and the yolks of 16 eggs. Blend sugar and flour together. Heat milk in water bath. Mix sugar and flour with another pint of cold milk and pour hot milk upon it stirring so as to prevent lumps. Return to fire and add the butter. When smooth and thoroughly cooked pour the mixture upon beaten egg yolks and return to fire. When cooked, cool thoroughly, then fold in the beaten whites of the eggs and one quart of whipped cream. Tint a rich yellow and place in freezer. When mixture begins to stiffen add two pounds finely cut seeded raisins, one pound each of pecan nuts and almond nuts chopped and one pound of chopped cherries. Finish freezing. Charge 15 cents.

Frozen Pudding a la Milanaise

Line a large-sized ice pudding mold with the following cream: One quart of cream, 12 yolks of eggs, 12 ounces of sugar and a little vanilla; freeze until nearly stiff; add 2 ounces of smooth almond paste and 4 ounces of finely roasted and powdered macaroon crumbs and flavor with brandy. Previously freeze a water ice of 1 quart of water, 1 pound of sugar, 4 ounces sweet milk, and 1 pound of sugar, 4 ounces almonds, pounded; in addition to half a pint of water in order to draw the milk pressed through a napkin; 2 whites of eggs and the juice of 2 lemons; freeze the mixture. color a very delicate green and when frozen add 2 ounces of chopped pistachio almonds, 2 ounces of finely cut angelica, 2 ounces of finely cut green French prunes, 2 ounces of red cherries, cut in halves; mix well and fill the interior of the above lined mold. Allow two hours to harden before turning it out for use and serve with Maraschino cream sauce.

Frozen Sponge Pudding

Break up 10 ounces of ladyfingers, place in a kettle and add 3 pints of boiled cream or milk, 10 egg yolks and 10 ounces of sugar, heat the mixture for about ten minutes without coming to a boil, then remove and let cool. Then strain into the freezer, add 1 quart of raw cream and a flavoring of orange flower water and freeze. Next prepare the molds (melon molds are generally used for this pudding) in the following way: Pack them in crushed ice, well salted, then line the mold with French vanilla ice cream or pistachio ice cream and place in the mold in the order named a layer of lady-fingers, dipped in Maraschino, a layer of the frozen custard, a layer of different kinds of chopped preserved French fruit, then again a layer of custard, and so on until the mold is nearly full, spreading over the top the same cream as that used for the mold lining. Then pack in ice and salt for at least one hour; serve with rum sauce. This consists of vanilla cream sufficiently beaten in order to get it smooth, with an addition of whipped double cream and a strong flavoring of rum.

Arabian Frozen Pudding

One-half cup ground tapioca, two tablespoonfuls gelatin, one and one-half cups of sugar, half a pound of dates, one pint of milk, one quart of cream, one tablespoonful vanilla, and one tablespoonful ginger extract.

Cook tapioca in boiling water until perfectly transparent and it has absorbed all the water with which it was covered. Add a pint of cream and the sugar to this and scald. Soak the gelatin in part of the cold milk and add to hot mixture. Cool. Add rest of milk, vanilla, ginger, dates. Fold in rest of cream whipped. Serve with a garnish of currant jelly.

ICES

Lemon

Four quarts of water, 10 lemons, 4½ pounds of sugar. Grate half the lemons, squeeze out, and put rind, juice, half the water and sugar into a pan, set it on the fire and stir until the sugar is dissolved and it becomes quite warm. Then remove and add the remaining 2 quarts of water and strain into the freezer. If it is not tart enough, add a solution of citric acid to suit the taste; then freeze in the usual manner. Some makers add a few egg whites before freezing or when half frozen; this is not recommended, as it makes the ice too light, and also to become rough after standing any length of time.

Lemon Granito

Make a rich lemonade, using plenty of sugar. Put into a freezer, imbedded in broken ice and salt; twirl the freezer first to the right and then to the left, and as the syrupy liquid freezes on to the sides of the cylinder of the freezer detach it by scraping it down into the center with a spatula, keeping in mind that the mixture must be only half frozen so as to resemble snow-like water, and just sufficiently liquid to admit of being poured into glasses. The caterer will find this a pleasant addition to the entertainment programme of a woman's afternoon whist or euchre club.

Orange

Take the juice of 8 oranges; sugar 2½ pounds; fruit acid, 2 ounces; gelatin, 2 ounces; adding enough water to make the whole measure 6 quarts. Freeze.

Raspberry

One pint raspberry wine (unfermented), 1½ pints sugar syrup, 12 pounds to the gallon; 1½ pints water; mix and freeze in the usual manner. The fountain man may deem it advisable to use the fresh fruit instead of the wine in the above formula.

Raspberry

This is made in the same manner as strawberry, using raspberry juice; it should be brighter in color.

Raspberry

Press juice and fruit through a fine sieve to make three quarts. Add 7 to 9 pints water to the 3 quarts of juice, etc. Add the juice of three lemons and two pounds of pulverized sugar together with one ounce of raspberry extract. More sugar may be added per taste. Freeze.

Red Currant and Raspberry

One quart of water, 6 ounces of red currant juice, 4 ounces of raspberry juice, 1 small lemon, 1 pound of sugar. Make a syrup of the sugar and water, adding the juice of the lemon; when nearly cold add the fruit juices, previously mixed. When cold, strain and freeze. Red currants are the best kind to use with raspberries, but black currants and raspberries will blend fairly well. If black currants are used the ice will be a little darker in color. If an all black currant ice is desired use 10 ounces of the juice and omit the raspberry. A little pink color may be added to the red currant ice.

Strawberry

Strawberry juice, 1 pint; simple syrup, 1½ pints; water, 1½ pints; lemon juice, 1 tablespoonful; black raspberry juice, 2 tablespoonfuls; orange flower water, ½ teaspoonful. Mix and freeze.

Strawberry

Press enough ripe strawberries through a fine sieve, leaving the pits behind, to make 1 pint of juice. To the juice add 3 pints of water, 2 pounds of sugar and the juice of 2 lemons (see that the sugar is fully dissolved), then strain through a fine sieve or cloth and freeze.

Strawberry

Four quarts of ripe strawberries sweetened with four pounds of sugar; mash thoroughly. Mix with this four quarts of water and the strained juice of six lemons. Freeze and serve in tall sherbet glasses. This is a good formula for everyday fountain use.

Frozen Strawberries

Crush two boxes of berries and sweeten. Allow to stand over night, for if the berries do not absorb the syrup they will be hard. Make a syrup of five quarts of water and 10 pounds of sugar. Add fruit, and the strained juice of 10 lemons. Color red and freeze.

Pineapple

One quart of pineapple juice or grated pineapple, 1 quart of water, 12 whole eggs or 16 yolks, 1 pound 10 ounces of sugar. Beat eggs and sugar to a cream. Cook all of the ingredients in a farina boiler to a soft custard, strain and beat till cold. Freeze like water ice, working the mixture vigorously in order to have the product as light and snowy as possible. It may be served in glasses or filled in molds and kept frozen in the ice cave until wanted. Serve with sweetened cream, flavored with pineapple.

Pineapple Phosphate

Pineapple juice, 1 pint; water, 1½ pints; plain syrup, 1½ pints; lemon juice, ½ lemon; solution citric acid, ½ ounce. Mix and freeze.

Pomegranate

Two dozen blood oranges; water, 4 quarts; simple syrup, 4 quarts. Peel the oranges and remove the seeds before pressing out the juice. This is a fine confection, but the scarcity of blood oranges at certain seasons makes its manufacture difficult as a regular thing. Freeze as an ice. The "pomegranate" makes an excellent springtime special.

Peach

Slice 10 ripe peaches, but do not peel them; boil till soft in one-half pint of water, then rub through a fine hair sieve. Mix the pulp with one pint of simple syrup, the strained juice of a lemon, and three or four drops of oil of almonds. Color if desired with a little carmine or cochineal. Put the preparation in a freezer and turn until frozen, then fill a mold with it, put on the lid and pack in ice. When ready to serve turn out on a fancy dish.

Peach Blush

Mash up 4 quarts of peaches and 16 oranges, extracting all the juice and straining. Flavor with a little citric acid and the bitter almond extract. Add 3 quarts of simple syrup, color a delicate pink, and freeze. This formula is recommended. (Wm. A. Dennis.)

Peach Frost

Take 2 quarts peaches, peeled and sliced, sprinkle with 1 pound of sugar and let stand 2 hours. Mash fine; add 1 cup of cold water, and freeze the same as ice cream.

Cranberry

One quart cranberries cooked with one quart water, pound of sugar, and a pinch of soda. Put through a colander. Freeze. Serve with meats. An additional quart of water may prove advantageous in this formula.

Frozen Cranberries

2 quarts cranberries
1 quart water
2 pounds sugar
½ pint lemon juice

Stew cranberries in water. Mash and force through sieve. Add rest of ingredients. Freeze.

Frozen Peaches

One basket ripe, sound peaches, skinned, the pits taken out and quartered and à syrup made of 5 quarts of water and 10 pounds of sugar; put the peaches into the boiling syrup and allow to stand over night to become soft and absorb some of the syrup, otherwise the peaches will be very hard when frozen. Strain and freeze the juice; when hard enough, lightly work in the peaches, being careful not to mash them, repack the can and let stand for an hour.

Frosted Peaches

Two quarts of chopped peach, one quart of water, two and one-half pounds sugar, the juice of two lemons, and a pint of canned cherries, juice and all. Boil sugar and water, add chopped cherries and peaches. Bring to boiling point again. Combine with rest of ingredients and freeze. Garnish with sugared almonds.

Cherry

To 3 quarts of base syrup add 2 pints of cherry juice, made by boiling the fresh fruit with sugar and water, and freeze. It will usually be found advisable in this case to add a little red coloring.

Cherry

Dissolve 3 pounds of sugar in 1 quart cherry ice and add juice of a couple of lemons to flavor. The mixture will take more water, probably half a gallon or a little less, according to the degree of strength required. Mix, strain and freeze in the usual way.

Cherry Conserve

Two quarts cherry conserve, one quart water, one pint grape juice. Freeze.

Grape

Grape juice, one pint; juice of two lemons; juice of 2 oranges; water, 1 quart; granulated sugar, 1 pound. If the water and sugar are brought to a boil and then allowed to cool, the water ice will be found to have a smoother consistency when frozen. If boiling is resorted to an additional pint of water may be necessary. Freeze slowly.

Grape Fruit Ice

The juice of 18 grape fruit is mixed with 3 pounds of sugar and 2 quarts of water, and 2 ounces of soaked gelatin added just before the freezing. It should be observed that grape fruit vary considerably in flavor.

Grape

Mix three quarts of grape juice with 1 quart of orange juice and 2 pounds of sugar. Freeze, and, when partly frozen, the whites of two eggs may be beaten in the mix, though this is not necessary.

Apricot

To 4 quarts of simple syrup add the juice of 6 quarts of good apricots and of 6 lemons, and water to make 12 quarts. This can either be made clear by straining or the apricot pulp left in. This ice has a delicious flavor.

Apricot

Three quarts ripe apricots, 3 quarts of water, 8 pounds of icing sugar, 1 ounce of citric acid solution. Press the apricots through a colander, and add the other ingredients.

Banana

Make a syrup by boiling and cooling three quarts of water and three pounds of sugar for fifteen minutes. Strain the juice of six lemons and four oranges. Press pulp of eight bananas through a sieve and thoroughly incorporate. Freeze. Let stand for two hours to ripen.

FROZEN PUNCH

This combination may be made directly from the fruit or from bottled fruit juices of any reputable manufacturer. If the former method be followed, first mash through a sieve the fruit, one part of raspberry to three of currants, until a pint of juice is obtained. Mix this with one pound of sugar, adding the juice of half a lemon, or syrup, a sufficient quantity. Dissolve by aid of heat. If a deep tint is desired use red coloring. Strain through the sieve into a bowl, add 1 quart of water and pour into the freezer and freeze. To color after freezing, mix the coloring with a little of the composition and work in smoothly.

PUNCH FRAPPE

1 quart water
1½ pounds sugar
1 pint currant jelly
1 pint orange juice
½ pint lemon juice
4 bottles ginger ale
1 pint Maraschino cherry juice

Freeze, serve in tall, stemmed glasses. It may be desirable to add more sugar to this formula.

FRUIT

Take a half gallon of crushed cherries, 1 pint of crushed pineapple, 1 pint of crushed strawberries, 1 can of sliced pineapple (chopped), ½ dozen bananas, sliced, 1 pound of chopped nuts, ½ bottle of Maraschino cherries (sliced), 1 gallon of syrup, then add an ounce of solution of citric acid, and water enough to make 3 gallons. Freeze, pack and let stand. Then serve with a little whipped cream and a cherry on top.

In this formula it is well to soak the fruit in the syrup over night. Also, do not freeze too hard at first.

FROZEN FRUITS

Take a quantity of ripe strawberries, hull and pass them through cold water in order to wash or rinse out all sand or grit. Now squeeze and press them to a pulp through a coarse hair sieve into a porcelain or earthenware bowl or crock, adding to each quart of the pulp so obtained a half pound of fine sifted pulverized sugar, half a pint of water and the juice of an orange. Mix and freeze as directed for ice cream, and immediately transfer the frozen fruits to a porcelain-lined can or stoneware or earthenware jar well set in ice and salt. Fruits other than strawberries may be similarly prepared, but it is essential that the frozen mixture be kept frozen until served, if the fruits are to be well preserved.

FROZEN FRUITS

Mix ½ gallon of crushed cherries, 1 pint of crushed strawberries, 1 shredded pineapple, 6 sliced bananas, 3 finely sliced oranges, one-half bottle of Maraschino cherries, 1 gallon of base syrup, and water to make three gallons. The mixture should be packed in a freezer and frozen without stirring. It should be served topped with whipped cream and a cherry. This is a big winner at any fountain.

COMMUNE BONUM

Boil together, for twenty minutes, one pint of sugar, one quart of water and one pint of chopped pineapple. Add to this mixture 4 ounces of lemon juice and 8 ounces of orange juice. When cold strain and freeze.

LINCOLN FRAPPE

4 cups water
2 cups sugar
¼ cup lemon juice
2 cups grape juice
1 cup orange juice
1 cup pineapple juice

Increase the amount of sugar if not considered sweet enough.

TUTTI FRUTTI

Boil four cups of sugar with two quarts of water 20 minutes. Add one cup of strained lemon juice and a cup each of diced grape fruit, orange and pineapple pulp, a cup of chopped raisins and a cup of chopped walnut meats. Freeze.

KIRCHE PUNCH

For this make a regular orange water ice, adding 4 ounces of kirschwasser to every quart of ice and meringue in the same proportion as for Maraschino punch.

JAPANESE

4 cups water
2 cups sugar
2 cups strained orange juice
1 pint chopped cherries
¼ cup lemon juice
Grated rind of two oranges
Grated rind of two lemons
Flavor with pistachio and Maraschino

When partly frozen add one pint of chopped cherries. More sugar may be required in this formula, add per taste.

ICELAND ICE

Peach juice (fresh)	3 quarts
Orange juice	1 quart
Sugar	4 pounds
Simple syrup	1 quart
Water	1 quart

Strain through fine sieve and freeze.

SUWANEE WATERMELON

Express the juice from the red pulp of a watermelon through a fine hair sieve, and for every quart of juice add 4 ounces of sugar, the juice of one orange and four ounces of grape juice. Mix well and freeze in the same manner as for other ices. If desired, the color may be heightened by the addition of cochineal solution.

ZEPHYR

Place one quart of syrup of 18° strength into a saucepan, add the yellow rind of one citron and one orange, also half of a vanilla bean. Set on the fire and let come to the boiling point, then pour out into an earthen bowl and cover well for two hours. Strain through a fine sieve, add the juice of two lemons and freeze.

WHITE HOUSE

One pound of sugar dissolved in two quarts boiling water. Add the strained juice of six lemons, an ounce of extract of spearmint, and a little pure food green coloring to tint.

EDEN

1½ pounds sugar
1 quart water
2 quarts sweet cider
1 quart orange juice
½ pint lemon juice

Boil sugar and water half an hour. Cool, add fruit juices and freeze.

FROZEN COFFEE

Six ounces Mocha coffee, 10 ounces Java coffee, 3½ pounds sugar, sufficient water. Grind and mix the coffee, pack in a glass percolator, cover tightly, and pour on boiling water in 8-ounce quantities until 40 ounces of liquid have been obtained. Add sugar and dissolve by agitation. Serve 1 ounce to sherbet glassful of shaved ice, with a spoon. In this formula it might be well to start with 2 quarts boiling water. Charge 5 cents for 8-ounce glass.

FROZEN COFFEE

Three quarts water, 1½ pounds sugar, ¾ pound fresh roasted coffee, 1 white of egg. Grind the coffee quite fine and put it into a gallon jar, first scalding the jar with boiling water.

Put 3 quarts of fresh water into a kettle, on a quick fire; at the first boil pour it on the coffee, stir well, cover and set in a warm place to draw. Stir occasionally for five minutes, let stand till well settled, pour off the clear coffee through fine muslin, add water to make 3 quarts, dissolve sugar in it, and cool. Put in the freezer, add the egg, and freeze to a soft mush, like wet snow. It is served in tall goblets. This is a very popular ice in France, and is called "Cafe frappe a la glace"; also "Cafe mousseux."

Frozen tea and many wines and cordials are prepared likewise.

TEA FRAPPE

Upon 6 teaspoonfuls of mixed tea pour 2 quarts of freshly boiling water; allow to stand for 10 minutes; strain off and sweeten to taste. When cold freeze.

PISTACHE

Simple syrup, 3½ pints; water, 3½ pints; cherry juice, 2 ounces; lemon juice, 2 ounces; orange flower water, ½ ounce; essence of bitter almonds, ½ dram. Color green. Mix and freeze.

MAPLE LEAF

Use either fresh currants and raspberries to obtain a quart of juice and pulp equal parts or use a tumbler of jam made of these fruits dissolved in three cups of boiling water and strained. Boil one quart of maple syrup 10 minutes. Combine sugar and fruit juice and add the juice of two lemons and two oranges and two quarts of water. Freeze.

MALTED MILK

Dissolve four tablespoonfuls of powdered gelatin in one cup of cold water. Add one cup of boiling water and use this liquid to stir four ounces of malted milk to a smooth paste. To this add one quart of pineapple and orange juice, strain and freeze.

SHERBETS

HINTS FOR SHERBET MAKING

Do not as a rule add your flavorings until the syrup has thoroughly cooled.

Two ounces of gelatin to 10 gallons of "batch" will prevent separation and will also insure the ices from being too hard.

When boiling syrup, particularly if it is to be heavy, a scant teaspoonful of cream of tartar to 5 pounds of sugar will prevent crystalization.

LEMON NUT

One quart water, one pint sugar and grated rinds of four lemons boiled 10 minutes and cooled. Add the juice of six lemons, half a cup of shredded candied lemon peel, half a cup chopped nut meats and the stiffly beaten whites of eight eggs. Freeze. Serve with a sprinkling of chopped nuts.

LEMON JELLY

Boil two quarts of water with four cups of sugar for 15 minutes. Dissolve one ounce of granulated gelatin by soaking in a little cold water and adding a cup of boiling water. Combine hot syrup, gelatin and two and a half cups of strained lemon juice. Put in freezer, and when it begins to stiffen add beaten whites of four eggs. Finish freezing. Serve in sherbet cups decorated with ripe strawberries or cherries or strips of candied lemon peel.

PINEAPPLE

Two pineapples grated, 2 quarts of water, 2 pounds of sugar, beaten whites of 2 eggs. Freeze same as ice cream.

PINEAPPLE

Peel and crush 2 pineapples; then make a boiling syrup of 2½ pounds sugar and 2 quarts of water and pour it over the pineapples. Let stand until nearly cold, then add the juice of 5 lemons; strain, press the liquid from the pineapples, pour into freezer, add the whites of 4 eggs and freeze. Then work in a good ½ pint of Maraschino.

REAL PINEAPPLE SNOW

Take 1 ounce of granulated gelatin and dissolve it in a quart of boilng water. Put 3 quarts of simple syrup and 2 quarts of water into a large vessel and stir in the gelatin solution, the juice of six lemons, the beaten whites of 2 eggs, and 1 pint of rich cream. Put the mixture in a freezer and freeze until almost hard, then add 1 pint of crushed pineapple and 1 pint of pineapple stock and freeze until quite hard. This quantity makes 3 gallons. Serve in a sherbet glass with a spoon and top off with a Maraschino cherry. This formula is especially recommended. (P. W. McCabe.)

PINEAPPLE FROST

Three quarts of water and four pounds of sugar made into a thin syrup. Shred four ripe pineapples; add to hot syrup, also the strained juice of six lemons and three oranges. Set aside until cool. Prepare two ounces of granulated gelatin by soaking it in cold water and dissolving with one quart of boiling water. Mix with the previous mixture. When the whole is cool put into the freezer and freeze as usual.

PINEAPPLE

One tablespoonful gelatin soaked in 1 cup cold water 15 minutes. Dissolve with 1 cup of boiling water. Take ½ can grated pineapple and 1½ cups sugar, juice of 1 lemon. Add strained gelatin, put in freezer and pack with ice and salt and freeze.

CHERRY

Spring or distilled water, 5 gallons; Maraschino cherries (cherries cut in half), ½ gallon; Morello cherry syrup, 1 pint; granulated sugar, 7 pounds; whites of 2 eggs. Soak cherries in syrup. Mix all together; stir and freeze. Top off with 1 cherry when served. Use a little red color.

CHERRY SIREN

Dissolve two pounds of sugar in three quarts of cherry juice. Freeze until it begins to stiffen. Stir in the stiffly beaten whites of four eggs sweetened with six ounces of powdered sugar. Freeze and pack.

CURRANT

Three quarts water, 1 pint currant juice; 2 pounds of sugar; white of 1 egg. Cook the sugar and water to a clear syrup; skim and cool it, add the white of egg and the fruit juice and freeze. A small portion of raspberry juice much improves the flavor.

GRAPE

Two pounds of sugar, 2 lemons, 1 orange, 2 quarts of red Tokay grapes, 1 quart of water. Put grapes, sugar and water in a kettle and place over a slow fire; under constant stirring bring the mixture to a boil, then pass it through a sieve, leaving skin and pits behind. Squeeze the lemons and orange and add the juice. When cold, freeze in the usual manner. If this is to be served in glasses, beat up 4 egg whites quite stiff and mix it into the batch until smooth and foamy. A few drops of red color may be added, and 2 or 3 whole grapes placed on each portion.

GRAPE JUICE

Sweeten 1 quart grape juice to taste, add ½ pound of sugar to the juice of 6 oranges, let stand till sugar dissolves, mix together and freeze slowly. Beat the white of an egg, adding a tablespoonful powdered sugar and stir into the sherbet, repack and set aside for 2 hours. Serve in sherbet cups.

GRAPE

For eight persons mix one pint of grape juice, the juice of one lemon, and one heaping teaspoonful of gelatin dissolved in boiling water. Freeze quickly, and add the beaten white of one egg just before it is frozen. (U. S. Dept. of Agric.)

GRAPE AMBROSIA

Use whites of 18 eggs, beat to a froth and add sugar, 5 pounds; mix well and add sweet milk, 1 gallon; water, 2 gallons; Welch's grape juice, 2 quarts; grated pineapple, 2 cans; fruit acid, 2 ounces; essence of lemon, ¼ ounce. Mix all well in a freezer. Let stand, after being well packed, for an hour or so to become harder. Serve same as ice cream.

NECTAR SHERBET

Strawberry syrup	2 quarts
Raspberry syrup	2 quarts
Vanilla syrup	1 quart
Lemons (juice of)	18
Water	4 quarts
Whites of eggs	3

Strain and freeze. This sherbet might possibly be improved by eliminating either the strawberry or the raspberry syrup.

MINT

Grate the rind of six lemons and six oranges. Add two pounds of sugar and a dozen stalks of mint. Dissolve in two quarts of cold water. Bring to the boiling point and boil for 10 minutes. Tint a dark green with pure food color, remembering that it will be much lighter when frozen. Strain. Add one teaspoonful of essence of peppermint. Freeze.

MINT

Combine two cups of sugar, one cup of strained lemon juice and one tablespoonful of mint extract to two quarts of boiling water. Cool, tint with a leaf of green certified pure food color and freeze. Serve in tall glasses with a sprig of mint in each glass.

CREME DE MENTHE

1 pint hot water
1 quart cold water
2 ounces creme de menthe cordial
8 lemons
¼ pound loaf sugar
¾ pounds sugar

Wash and wipe lemons and rub cut loaf sugar lumps over them until they have absorbed oil. Pour strained lemon juice over granulated sugar and add hot water. Lastly add cold water and cordial. Charge 15 cents.

TUTTI FRUTTI

Take 1 pint of simple syrup, 1 pint of water, 4 ounces of kirschwasser, a teaspoonful of pure vanilla extract, the juice of 2 lemons and a pint of mixed fruit, cut into small pieces; mix the syrup, water, kirschwasser, vanilla and lemon juice, and freeze the mixture; then mix into it a meringue mass, made of the whites of 2 eggs and 2 ounces of powdered sugar, freeze again and then add the fruit; mix lightly but thoroughly well in; the ice may then be molded and buried in ice and salt till needed for use.

FRUITED

Mash one dozen bananas and combine with the strained juice of one dozen oranges and one dozen lemons, six pounds of sugar, the stiffly beaten whites of a dozen eggs, three quarts of water. Freeze as usual.

LAND OF PROMISE

Mix one pint grape juice, one pint of orange juice, one-half cup of lemon juice and one quart of water, sweeten rather heavily. Freeze until this begins to thicken, then add one quart of whipped cream previously mixed with one cup of strained honey. Freeze and pack.

FOUR-IN-HAND

Dissolve by heat three pounds of sugar in three pints of water. Into this slice five bananas, half a dozen oranges, two lemons and add a shredded pineapple. When the mixture begins to stiffen add the beaten whites of four eggs.

ARCTIC

Sweeten one quart of grape juice to taste, add the juice of 6 oranges and ½ pound of sugar, and stir until the sugar dissolves; add 4 ounces of fresh lemon syrup, mix all well together, and freeze slowly. Beat the white of an egg with a tablespoonful of sugar, and stir into the sherbet, then repack and set aside for two hours. Serve in sherbet cups.

FRIENDSHIP

Peel and rub through a sieve equal parts of peaches, plums and apricots to make six cups or three pints. Boil three pints of water and three pounds of sugar for 10 minutes and allow to cool. Add to fruit pulp and fold in stiffly beaten whites of one dozen eggs. Flavor with peach extract and add eight ounces of Maraschino syrup. Freeze.

CAFE FRAPPE

Water, 3 quarts; coffee extract, 6 ounces; sugar, 1½ pounds; whites of 3 eggs, beaten thoroughly; caramel to color. Mix and freeze to a mushy snow. Serve in glasses.

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